As filed with the Securities and Exchange Commission on October 21, 2024.

Registration No. 333–282469

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Amendment No. 1
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Septerna, Inc.
(Exact name of registrant as specified in its charter)

Delaware	2834	84-3891440
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

Septerna, Inc.
250 East Grand Avenue
South San Francisco, California 94080
(650) 338-3533
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Jeffrey Finer, M.D., Ph.D.
President and Chief Executive Officer
Septerna, Inc.
250 East Grand Avenue
South San Francisco, California 94080
(650) 338-3533
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom Deepa M. Rich Adam V. Johnson Goodwin Procter LLP 601 Marshall Street Redwood City, California 94063 (650) 752-3100	Jeffrey Finer, M.D., Ph.D. President and Chief Executive Officer Septerna, Inc. 250 East Grand Avenue South San Francisco, California 94080 (650) 338-3533	Denny Won Charles S. Kim Kristin VanderPas Dave Peinsipp Cooley LLP 3 Embarcadero Center, 20th Floor San Francisco, California 94111 (415) 693-2000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934.

Large Accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant files a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 21, 2024

10,937,500 Shares

Common Stock

This is an initial public offering of shares of common stock of Septerna, Inc.

We are offering 10,937,500 shares of our common stock. Prior to this offering, there has been no public market for our common stock. It is currently estimated that the initial public offering price per share will be between $15.00 and $17.00. We have applied to list our common stock on the Nasdaq Global Market under the symbol "SEPN," and this offering is contingent upon obtaining approval of such listing.

We are an "emerging growth company" and a "smaller reporting company" as defined under U.S. federal securities laws and, as such, we have elected to comply with certain reduced public company reporting requirements.

Investing in our common stock involves a high degree of risk. See the section titled "Risk Factors" beginning on page 14.

	Per Share	Total
Initial public offering price	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds, before expenses, to us	$	$

(1) See the section titled "Underwriting" for additional disclosure regarding the underwriting discounts and commissions and estimated offering expenses.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional 1,640,625 shares of our common stock.

The underwriters expect to deliver the shares of common stock to purchasers on , 2024.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

J.P. Morgan **TD Cowen** **Cantor** **Wells Fargo Securities**

The date of this prospectus is , 2024.

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We have not, and the underwriters have not, authorized anyone to provide any information or to make any representation other than those contained in this prospectus, any amendment or supplement to this prospectus or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares of our common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus, any amendment or supplement to this prospectus or any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside the United States.

MARKET AND INDUSTRY DATA

Market data and certain other statistical information used throughout this prospectus are based on independent industry publications, governmental publications, reports by market research firms, including, but not limited to, Clarivate™, or other independent sources that we believe to be reliable sources. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. In some cases, we do not expressly refer to the sources from which this data is derived. We are responsible for all of the disclosure contained in this prospectus, and we believe that these sources are reliable. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under the section titled "Risk Factors" and elsewhere in this prospectus. Some data are also based on our good faith estimates. The content of, or accessibility through, the below sources, except to the extent specifically set forth in this prospectus, does not constitute a portion of this prospectus and is not incorporated herein and any websites are an inactive textual reference only.

The source of certain statistical data, estimates, and forecasts contained in this prospectus are the following independent industry publications or reports:

- Pokhrel B, Bhusal K. Graves Disease. Treasure Island (FL): StatPearls Publishing; January 2024. Creative Commons Attribution-Non Commercial-No Derivatives 4.0 International License (CC BY-NC-ND 4.0);
- Guillen-Aguinaga, S., et al. Updosing nonsedating antihistamines in patients with chronic spontaneous urticaria: a systematic review and meta-analysis. British Journal of Dermatology 175.6 (2016); and
- Davies, M., et al. Management of Hyperglycemia in Type 2 Diabetes, 2022. A Consensus Report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). Diabetes Care 45.11 (2022).

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including the sections titled "Risk Factors," "Special Note Regarding Forward-Looking Statements," and "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our financial statements and the related notes thereto included elsewhere in this prospectus. Except where the context otherwise requires or where otherwise indicated, the terms "Septerna," "we," "us," "our," "our company," "the company," and "our business" refer to Septerna, Inc.

Overview

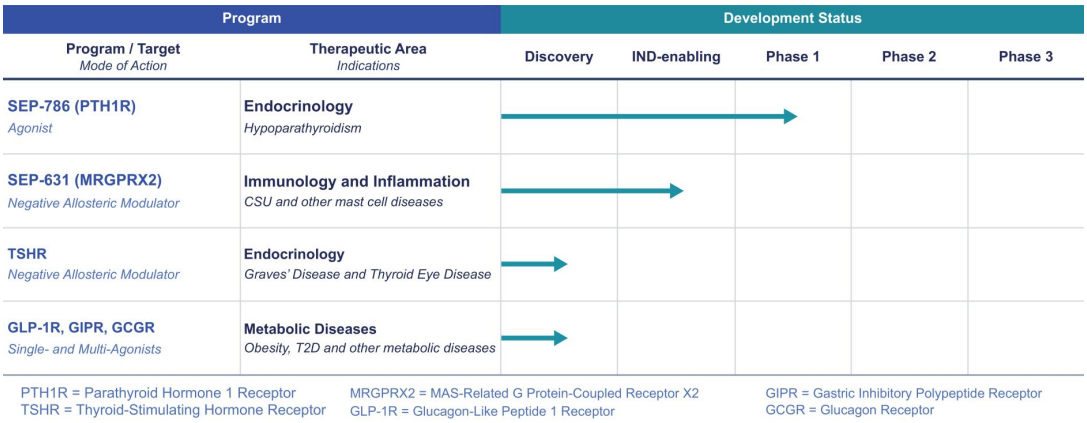
We are a clinical-stage biotechnology company pioneering a new era of G protein-coupled receptor (GPCR) oral small molecule drug discovery powered by our proprietary Native Complex Platform™. Our industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of our deep pipeline of product candidates focused initially on treating patients in three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases.

GPCRs are the largest and most diverse family of cell membrane receptors and regulate physiological processes in nearly every organ system of the human body. Due to their significant role in human diseases, GPCRs have been the most productive target class in drug discovery history, accounting for approximately one-third of all U.S. Food and Drug Administration (FDA) approved drugs, representing approximately 500 products with combined global revenue of approximately $125 billion in 2023. Despite the pharmacological and commercial success of GPCR-targeted agents, about 75% of potential GPCR therapeutic targets remain undrugged and, for certain validated GPCRs, novel binding pockets may exist that could offer enhanced therapeutic benefits. Each step in GPCR activation involves subtle conformational changes that have been historically challenging to reproduce outside of a cell. The inability to isolate GPCR proteins in their native functional form outside of a cellular context has prevented scientists from leveraging some of the state-of-the-art technologies that have revolutionized drug discovery in other major target classes over the past decade. This complex challenge has limited GPCR drug discovery, particularly the development of novel oral small molecules, such as agonists (which activate GPCR signaling) for peptide GPCRs and allosteric modulators (which either increase or decrease the degree of GPCR activation by endogenous ligands).

Our proprietary Native Complex Platform™ replicates the natural structure, function, and dynamics of GPCRs outside of cells at an industrial scale for, as we believe it, the first time. Our foundational technologies enable us to isolate, purify, and reconstitute full-length, properly folded GPCR proteins within ternary complexes with ligands and transducer proteins in a lipid bilayer that mimics the cell membrane. We then apply state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we conduct GPCR oral small molecule drug discovery using an industrialized and iterative structure-based drug design approach for a diverse collection of GPCR targets. Our Native Complex Platform™ is designed to enable us to target specific GPCRs, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies, including agonists, antagonists (which inhibit GPCR signaling), and allosteric modulators, to affect GPCR signaling in different ways to achieve desired therapeutic effects.

We are advancing a deep portfolio of oral small molecule GPCR-targeted programs with novel mechanistic approaches to treat diseases across multiple therapeutic areas for patients with significant unmet needs. Our wholly-owned pipeline, summarized in the figure below, is focused initially on three therapeutic areas:

endocrinology, immunology and inflammation, and metabolic diseases. We intend to evaluate opportunities in other major therapeutic areas, such as neurology, women's health, cardiovascular, and respiratory disease.



Leveraging our team, scientific and technical advisors, and our proprietary Native Complex Platform™, we aim to be a leader in the development of oral GPCR-targeted medicines for patients with significant unmet needs.

Our Native Complex Platform™ Aims to Unlock the Full Therapeutic Potential of GPCRs

In the past decade, drug discovery across various target classes has been revolutionized by a variety of state-of-the-art tools and technologies. These innovations include structure-based drug design, computational docking, and DNA-encoded libraries (DELs). However, the utilization of these technologies has been limited for discovering oral small molecules targeting GPCRs due to the inability to isolate functional native GPCR proteins outside of a cellular context.

With our proprietary Native Complex Platform™, we can purify GPCRs outside of cells and reconstitute them into fully functional ternary complexes with transducer proteins (e.g., G proteins, beta-arrestins) and ligands (endogenous or synthetic), all housed within a well-defined lipid bilayer environment. These Native Complexes are full-length, properly folded GPCRs that retain their natural structure, function, and dynamics. We then apply state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we are advancing a new approach to GPCR drug discovery, designed to expand the landscape of druggable GPCR targets with novel oral small molecule medicines for patients.

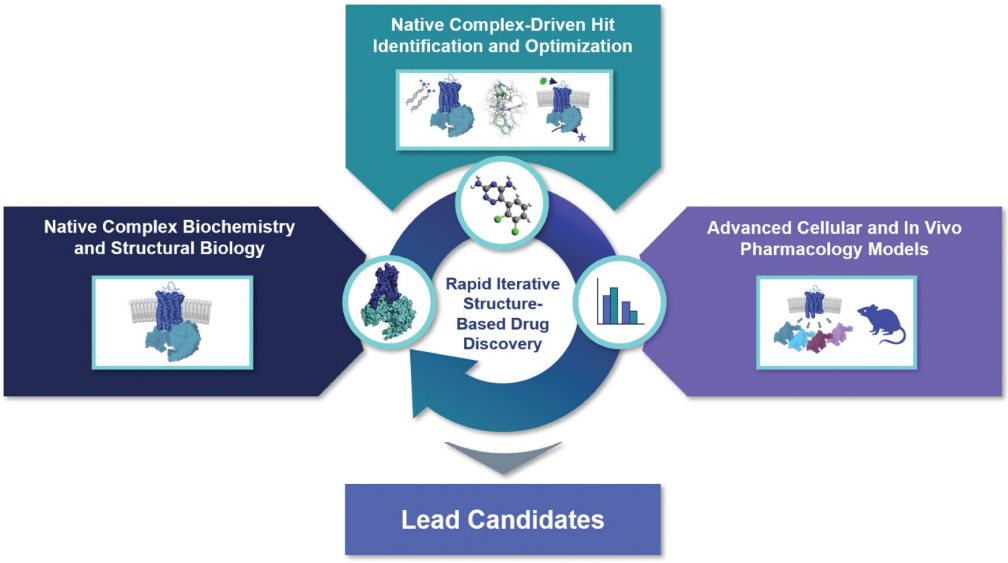
Our Native Complex Platform™ is powered by a suite of tools and technologies that we have optimized and integrated into a proprietary and industrialized workflow, and together form an efficient and iterative discovery process for identification and optimization of novel small molecule product candidates targeting high-value GPCRs, including:

- ***Native Complex biochemistry and structural biology:*** Our Native Complexes reconstitute native GPCR function in a purified biochemical format, which enables efficient high-resolution, three-dimensional structure determination using cryogenic electron microscopy (cryo-EM). This can reveal receptor binding pockets that we can target with a range of pharmacologies (agonists, antagonists, and allosteric modulators) as well as novel insights into mechanisms for GPCR modulation.
- ***Native Complex-driven hit identification and optimization:*** We virtually screen our GPCR structures against ultra-large-scale computational databases containing billions of candidate molecules to identify the most promising small molecule compounds that bind in pockets on the GPCR structure. We use technologies, including DELs, to screen billions of candidate molecules simultaneously, and we have

developed proprietary technologies to discover and optimize compounds with a variety of modes of action. In addition, we use our proprietary Native Complex biochemical screens in our hit identification and optimization processes.

- ***Advanced cellular and in vivo pharmacology models:*** We efficiently evaluate hits and lead compounds through the integration of advanced cellular and *in vivo* pharmacology models. Prioritized compounds with desired pharmacologies are then either advanced as potential drug candidates or fed back into the process for additional Native Complex-driven compound optimization.

Our oral small molecule drug discovery process, powered by our proprietary Native Complex Platform™, is depicted in the figure below.



Our industrial-scale Native Complex Platform™ is designed to target certain GPCRs for the first time, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies to achieve desired therapeutic effects. Our platform has led to the discovery and development of a pipeline of novel, highly potent and selective oral small molecules, and for our most advanced programs, optimized them into clinical development candidates.

SEP-786 – Oral Small Molecule PTH1R Agonist for Hypoparathyroidism

Hypoparathyroidism is a rare endocrine disease characterized by insufficient levels of parathyroid hormone (PTH) that affects approximately 70,000 patients in the United States and approximately 140,000 patients in Europe. Patients with hypoparathyroidism are at risk of both short-term and long-term complications, including muscle cramps, fatigue, cognitive dysfunction, and life-threatening complications, such as cardiac arrhythmias, seizures, and renal failure. The goal of treatment is to relieve symptoms and restore calcium and phosphate levels to normal. Current standard of care consists of high-dose calcium supplements and activated vitamin D (calcitriol); however, these therapies do not replace other functions of PTH to restore physiological mineral homeostasis or address all of the symptoms experienced by patients. Hormone replacement with injectable PTH peptides, either marketed or in clinical development, may improve blood chemistry profiles of patients via PTH1R activation but will require life-long daily injections. We believe there is a substantial opportunity for an oral small molecule therapy that offers convenience, improved compliance, and potentially superior efficacy.

Our lead product candidate, SEP-786, is a clinical-stage, oral small molecule agonist targeting PTH1R for the treatment of hypoparathyroidism. PTH1R is a historically difficult-to-drug small molecule target, yet we effectively leveraged our Native Complex Platform™ to discover and optimize SEP-786 with desired drug-like properties. We have successfully completed Investigational New Drug (IND)-enabling studies and have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, PK, and PD of SEP-786. We expect to report data from this trial in mid-2025.

SEP-631 – Oral Small Molecule MRGPRX2 NAM for CSU and Other Mast Cell Diseases

Chronic spontaneous urticaria (CSU) is a systemic inflammatory skin disease characterized by the spontaneous and persistent recurrence of itchy, painful hives, known as wheals, on the skin and angioedema, or swelling, that affects approximately 1.5 million patients in the United States. While there is no known trigger, the degranulation of mast cells and release of histamine and other inflammatory mediators lead to these debilitating symptoms. Patients are treated initially with antihistamines and non-responders may be treated with Xolair (omalizumab), an injectable anti-IgE monoclonal antibody. The targeting and blocking of IgE-mediated inflammation can effectively address symptoms; however, only an estimated 36% of these antihistamine-refractory patients respond to anti-IgE therapy. Mas-related G-protein coupled receptor member X2 (MRGPRX2) plays an important role in mast cell activation and degranulation. We believe an oral therapy that inhibits MRGPRX2 could provide a differentiated treatment option for patients with CSU given the selective inhibition of mast cells and potential for combination therapy.

SEP-631 is a selective, oral small molecule MRGPRX2 negative allosteric modulator (NAM) that we are developing initially for the treatment of CSU. We have initiated IND-enabling studies of SEP-631 and upon completion, we anticipate submitting for regulatory clearance to initiate a clinical trial.

In addition to CSU, we may develop SEP-631 for the treatment of other mast cell diseases. MRGPRX2 is highly and uniquely expressed on mast cells that drive multiple prevalent diseases, including allergic asthma, atopic dermatitis, interstitial cystitis, migraine, and prurigo nodularis. We believe SEP-631 could offer a novel oral treatment option for these patient populations.

TSHR Program – Oral Small Molecule TSHR NAM for Graves' Disease and TED

Graves' disease is one of the most prevalent autoimmune conditions affecting over 2 million patients in the United States and is the leading cause of hyperthyroidism, resulting in symptoms including anxiety, irritability, tremor, and fatigue. Treatments have remained largely unchanged over the past 70 years, and include anti-thyroid medications, radioactive iodine therapy to ablate thyroid gland function, and thyroidectomy surgery. These treatment options may initially address the underlying symptoms, but they are not disease-modifying and do not stop disease progression to thyroid eye disease (TED) for approximately 50% of Graves' disease patients. TED is a serious, progressive and vision-threatening autoimmune condition that can lead to eye bulging, swelling, pain and blurred or double vision. Current treatments for TED, such as TEPEZZA (teprotumumab-trbw), an anti-IGF-1R human monoclonal antibody, are designed to help manage symptoms. Despite reaching global sales of $2.0 billion in 2022, TEPEZZA requires several intravenous (IV) infusions over several months and has risks of serious side effects, including hearing loss and metabolic issues, such as increased blood glucose or hyperglycemia.

These autoimmune conditions are caused by autoantibodies that bind to and activate the thyroid stimulating hormone receptor (TSHR) on thyroid cells in the thyroid gland (leading to Graves' disease) and other cells including fibroblasts located behind the eyes (leading to TED). We believe an oral small molecule TSHR NAM could offer a novel disease-modifying treatment approach that directly addresses the pathobiology of both diseases by blocking TSHR overactivation caused by patients' autoantibodies. We are advancing several lead compounds towards selection of a development candidate for IND-enabling studies.

Incretin Programs - Oral Small Molecule Single- and Multi-Incretin Receptor Agonists for Metabolic Disorders Including Obesity and T2D

Obesity and diabetes are two of the most prevalent diseases in the world, affecting a combined total of more than 800 million people, and are associated with severe health complications, including cardiovascular disease and kidney failure, as well as an increased risk of death. Weight reduction is seen as an important treatment goal for patients with either condition. In recent years, several injectable peptide agonists targeting select metabolic hormone receptors, or incretin receptors, have been approved for the treatment of T2D and obesity.

Three incretins play significant roles in glucose metabolism and homeostasis: glucagon-like peptide-1 (GLP-1), gastric inhibitory polypeptide (GIP), and glucagon. Third-party clinical data with incretin-targeted therapeutics have demonstrated substantial and sustained reductions in body weight, as well as the ability to lower blood glucose and improve glycated hemoglobin (HbA1c). Global sales in 2023 for Ozempic and Wegovy (semaglutide, each marketed by Novo Nordisk), and Mounjaro and Zepbound (tirzepatide, each marketed by Eli Lilly and Company) were $18.4 billion and $5.3 billion, respectively. As a class, the marketed GLP-1 and GLP-1/GIP products generated $36 billion in global sales in 2023. Despite these advancements in the treatment of obesity and T2D, a number of key limitations remain for the incretin therapeutic class, including tolerability, prolonged titration schemes, injection administration, and supply challenges.

Based on unique chemical and structural insights obtained with our Native Complex Platform™, we believe we have an opportunity to discover and develop novel, next-generation, oral small molecules as selective single- or multi-acting GLP-1, GIP, glucagon receptor agonists. We are advancing several lead compounds towards selection of one or more development candidates for IND-enabling studies.

Summary of Risks Associated with Our Business

Investment in our common stock involves substantial risks and uncertainties, and our ability to execute on our business strategy is subject to a number of risks, which are discussed more fully in the section titled “Risk Factors.” You should carefully consider these risks before making an investment in our common stock. If any of these risks or uncertainties actually occur, our business, financial condition, or results of operations could be materially and adversely affected. In such case, the trading price of our common stock would likely decline, and you could lose all or part of your investment. These risks include, among others, the following:

- We have a limited operating history and have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future.
- Even if this offering is successful, we will require substantial additional funding in order to finance our operations. If we are unable to raise additional capital when needed on acceptable terms, or at all, we may be forced to delay, reduce, or terminate certain of our research and product development programs, future commercialization efforts or other operations.
- We are early in our development efforts. We have only recently initiated early clinical studies, and as a result it will be years before we commercialize a product candidate, if ever. If we are unable to identify and advance product candidates through preclinical studies and clinical trials, obtain marketing approval and ultimately commercialize them, or experience significant delays in doing so, our business will be materially harmed.
- Preclinical and clinical drug development is a lengthy and expensive process, with uncertain timelines and outcomes. If preclinical studies or clinical trials of our product candidates are prolonged or delayed, we may be unable to obtain required regulatory approvals, and therefore be unable to commercialize our therapeutic candidates or any of our future therapeutic candidates on a timely basis or at all.

- We may encounter substantial delays in the commencement, enrollment or completion of our planned clinical trials or we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities, which could prevent us from commercializing any product candidates we determine to develop on a timely basis, if at all.
- Serious adverse events, undesirable side effects or other unexpected properties of our product candidates may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our product candidates or, if discovered following marketing approval, revocation of marketing authorizations or limitations on the use of our product candidates, any of which would limit the commercial potential of such product candidate.
- Our product candidates are subject to extensive regulation and compliance obligations, which is costly and time-consuming and which may cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.
- Enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside our control, which could adversely affect our business, operating results and prospects.
- Our proprietary Native Complex Platform™ is based on novel technologies that are unproven and may not result in approvable or marketable products, which exposes us to unforeseen risks and makes it difficult for us to predict the time and cost of product development and potential for regulatory approval, and we may not be successful in our efforts to expand our development portfolio of product candidates.
- We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may invest significant resources to develop these capabilities. If we are unable to establish marketing, sales or distribution capabilities or enter into agreements with third parties to market and sell our products, we may not be able to generate product revenue.
- Even if any of our current or future product candidates receive marketing approval, such product candidate may fail to achieve market acceptance by physicians, patients, third-party payors or others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.
- We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than us.
- We rely on third-party manufacturers, clinical research organizations (CROs), contract manufacturing organizations (CMOs), and suppliers to supply, develop and test components of our product candidates. The loss of our third-party manufacturers, CROs, CMOs, or suppliers, their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, or changes in methods of product candidate manufacturing, development or formulation would materially and adversely affect our business.

The risks summarized above or described in full elsewhere in this prospectus are not the only risks that we face. Additional risks and uncertainties not presently known to us, or that we currently deem to be immaterial may also materially adversely affect our business, financial condition, results of operations, and future, growth prospects.

Corporate and Other Information

We were incorporated under the laws of the State of Delaware in December 2019 under the name GPCR NewCo, Inc. and changed our name to Septerna, Inc. in June 2021. Our principal executive offices are located at 250 East Grand Avenue, South San Francisco, California 94080, and our telephone number is (650) 338-3533.

Our website address is *www.septerna.com*. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

This prospectus includes our trademarks and trade names which are protected under applicable intellectual property laws and are our property. This prospectus also contains trademarks, trade names and service marks of other companies, which are the property of their respective owners. Solely for convenience, trademarks, trade names and service marks referred to in this prospectus may appear without the ®, ™ or SM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent permitted under applicable law, our rights or the right of the applicable licensor to these trademarks, trade names and service marks. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (JOBS Act). As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- being permitted to present only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure in this prospectus;
- reduced disclosure obligations about our executive compensation arrangements;
- not being required to hold nonbinding advisory votes on executive compensation or to obtain stockholder approval of any golden parachute arrangements not previously approved;
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act); and
- an exemption from compliance with the requirements of the Public Company Accounting Oversight Board regarding the communication of critical audit matters in the auditor's report on the financial statements.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1.235 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission (SEC). We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. Additionally, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, while we are an emerging growth company we will not be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies. As a result of this

election, our financial statements may not be comparable to those of other public companies that comply with new or revised accounting pronouncements as of public company effective dates. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies.

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (Exchange Act), meaning that the market value of our shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue was less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than $250.0 million or (ii) our annual revenue was less than $100.0 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

The Offering

Common stock offered by us	10,937,500 shares.
Option to purchase additional shares	We have granted the underwriters an option for a period of 30 days to purchase up to 1,640,625 additional shares of our common stock from us at the public offering price, less underwriting discounts and commissions on the same terms as set forth in this prospectus.
Common stock to be outstanding immediately after this offering	36,940,294 shares (or 38,580,919 shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $157.9 million (or approximately $182.3 million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities, as follows: approximately $54 million to advance the continued development of SEP-786, our lead product candidate from our PTH1R program through completion of a Phase 2 clinical trial in hypoparathyroidism patients, and additional molecules targeting PTH1R; approximately $24 million to advance the development of SEP-631 through completion of a Phase 1 clinical trial, and additional small molecules within our MRGPRX2 program; approximately $41 million for other research and development activities, including our TSHR and incretin receptor programs, other new GPCR programs, and continued innovation of our Native Complex Platform™; and the remainder to fund working capital and other general corporate purposes. See the section titled “Use of Proceeds.”
Risk factors	Investing in our common stock involves a high degree of risk. You should read the section titled “Risk Factors” and other information included in this prospectus before investing in our common stock.
Proposed Nasdaq trading symbol	“SEPN”

The number of shares of our common stock to be outstanding after this offering is based on 3,163,020 shares of our common stock (which includes 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture) outstanding as of June 30, 2024, and assumes the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering, and excludes:

- 1,796,272 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under our 2021 Stock Option and Grant Plan, as amended from time to time (2021 Plan), with a weighted-average exercise price of $2.68 per share;

- 1,228,574 shares of our common stock issuable upon the exercise of stock options granted after June 30, 2024 pursuant to the 2021 Plan, with a weighted-average exercise price of $6.81 per share;
- 3,690,000 shares of our common stock that will become available for future issuance under our 2024 Stock Option and Incentive Plan (2024 Plan), which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2024 Plan and any shares underlying outstanding stock awards granted under the 2021 Plan that expire or are repurchased, forfeited, cancelled, or withheld; and
- 369,402 shares of our common stock reserved for future issuance under our 2024 Employee Stock Purchase Plan (ESPP), which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP.

Unless otherwise indicated, all information in this prospectus reflects or assumes the following:

- a one-for-8.6103 reverse stock split of our common stock, which we effected on October 18, 2024 and a corresponding adjustment to the ratio at which our convertible preferred stock will convert into common stock;
- the automatic conversion of all outstanding shares of our convertible preferred stock as of June 30, 2024 into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering;
- 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture as of June 30, 2024;
- no exercise of the outstanding stock options described above;
- no exercise by the underwriters of their option to purchase up to an additional 1,640,625 shares of our common stock in this offering; and
- the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering and the effectiveness of our amended and restated bylaws upon the effectiveness of the registration statement of which this prospectus forms a part.

Summary Financial Data

The following tables summarize our financial data for Septerna, Inc. You should read the following summary financial data together with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes thereto included elsewhere in this prospectus. We have derived the summary statements of operations and comprehensive (loss) income data for the years ended December 31, 2022 and 2023 from our audited financial statements included elsewhere in this prospectus. We have derived the summary statements of operations and comprehensive (loss) income data for the six months ended June 30, 2023 and 2024, and the summary balance sheet data as of June 30, 2024, from our unaudited interim condensed financial statements included elsewhere in this prospectus. Our unaudited interim condensed financial statements were prepared on a basis consistent with our audited financial statements and include, in our opinion, all adjustments of a normal and recurring nature that are necessary for the fair statement of the financial information set forth in those statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future period and our interim results are not necessarily indicative of results that may be expected for the full year. The summary financial data included in this section are not intended to replace the audited financial statements and the related notes thereto included elsewhere in this prospectus and are qualified in their entirety by our financial statements and the related notes included elsewhere in this prospectus.

	Years Ended December 31,		Six Months Ended June 30,	
	2022	2023	2023	2024
	(in thousands, except for share and per share data)		(unaudited)	
Statements of Operations and Comprehensive (Loss) Income Data:				
Revenue	$ —	$ 151	$ —	$ 687
Operating expenses (income):				
Research and development	22,044	35,979	16,372	28,188
General and administrative	5,923	9,722	3,830	6,054
Gain on sale of non-financial asset	—	(47,625)	—	—
Total operating expenses (income)	27,967	(1,924)	20,202	34,242
(Loss) income from operations	(27,967)	2,075	(20,202)	(33,555)
Other income, net:				
Interest income	291	2,786	435	2,809
Other income (expense)	—	10	(2)	(63)
Total other income, net	291	2,796	433	2,746
(Loss) income before (provision) benefit for income taxes	(27,676)	4,871	(19,769)	(30,809)
(Provision) benefit for income taxes	—	(691)	—	202
Net (loss) income	$ (27,676)	$ 4,180	$ (19,769)	$ (30,607)
Net (loss) income attributable to common stockholders	$ (27,676)	$ 567	$ (19,769)	$ (30,607)
Net (loss) income per share attributable to common stockholders[1]:				
Basic	$ (19.26)	$ 0.29	$ (11.06)	$ (13.40)
Diluted	$ (19.26)	$ 0.29	$ (11.06)	$ (13.40)

	Years Ended December 31,		Six Months Ended June 30,	
	2022	2023	2023	2024
	(in thousands, except for share and per share data)			
			(unaudited)	
Weighted-average shares outstanding used in computing net (loss) income per share attributable to common stockholders[1]:				
Basic	1,436,875	1,928,586	1,788,039	2,284,414
Diluted	1,436,875	2,177,124	1,788,039	2,284,414
Pro forma net (loss) income per share attributable to common stockholders (unaudited)[2]:				
Basic		$ 0.29		$ (1.57)
Diluted		$ 0.29		$ (1.57)
Pro forma weighted-average shares outstanding used in computing net (loss) income per share attributable to common stockholders (unaudited)[2]:				
Basic		14,225,331		19,495,760
Diluted		14,473,869		19,495,760
Comprehensive (loss) income:				
Net (loss) income	(27,676)	4,180	(19,769)	(30,607)
Net unrealized loss on available-for-sale marketable securities	—	—	—	(8)
Total other comprehensive loss	—	—	—	(8)
Comprehensive (loss) income	$ (27,676)	$ 4,180	$ (19,769)	$ (30,615)

(1) See Note 13 to our audited financial statements and Note 10 to our unaudited interim condensed financial statements included elsewhere in this prospectus for details on the calculation of basic and diluted net (loss) income per share attributable to common stockholders.

(2) The unaudited pro forma basic and diluted net (loss) income per share were computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as of the beginning of the period, or the issuance dates of the respective convertible preferred stock, if later.

	As of June 30, 2024		
	Actual	Pro Forma[1]	Pro Forma As Adjusted[2]
	(in thousands, except for share data)		
	(unaudited)		
Condensed Balance Sheet Data:			
Cash and cash equivalents	$131,172	$ 131,172	$ 289,022
Marketable securities	17,665	17,665	17,665
Marketable securities, non-current	6,852	6,852	6,852
Working capital[3]	143,459	143,459	301,722
Total assets	176,633	176,633	334,070
Total liabilities	20,239	20,239	19,826
Total convertible preferred stock	224,157	—	—
Accumulated deficit	(77,183)	(77,183)	(77,183)
Total stockholders' (deficit) equity	(67,763)	156,394	314,244

(1) The pro forma balance sheet data gives effect to the automatic conversion of all outstanding shares of our outstanding convertible preferred stock as of June 30, 2024 into an aggregate of 22,839,774 shares of our common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity, each of which will occur immediately prior to the completion of this offering.

(2) The pro forma as adjusted balance sheet data gives effect to (i) the pro forma adjustments set forth in footnote (1) above and (ii) the issuance and sale of 10,937,500 shares of our common stock in this offering at an assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase or decrease in the assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash, cash equivalents, and marketable securities, working capital, total assets and total stockholders' (deficit) equity by $10.2 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash, cash equivalents, and marketable securities, working capital, total assets and total stockholders' (deficit) equity by $14.9 million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) We define working capital as current assets less current liabilities. See our unaudited interim condensed financial statements and the related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below together with all of the other information contained in this prospectus, including our financial statements and related notes appearing at the end of this prospectus, before deciding to invest in our common stock. If any of the events or developments described below were to occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our common stock could decline and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Risks Related to Limited Operating History, Financial Position and Capital Requirements

We have a limited operating history and have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future.

Pharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a clinical-stage biotechnology company with a limited operating history, which may make it difficult to evaluate the success of our business to date and assess our future viability. Since our inception in December 2019, we have focused primarily on organizing and staffing our company, business planning, establishing our intellectual property portfolio, raising capital, developing our proprietary and structure-based drug discovery platform, identifying and developing our product candidates, conducting research and preclinical studies, including IND-enabling studies, initiating and conducting clinical trials, and providing general and administrative support for these operations. Our approach to the discovery and development of product candidates based on our Native Complex Platform™ is unproven, and we do not know whether we will be able to develop any product candidates that succeed in clinical development or commercially. Further, our lead product candidate, SEP-786, is in early clinical development and our other product candidates and development programs are in preclinical development or in the drug discovery stages. Accordingly, we have not yet completed any clinical trials, demonstrated an ability to successfully obtain regulatory approvals, manufactured a clinical- or commercial-scale product, or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a history of successfully developing and commercializing pharmaceutical products.

We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our preclinical and clinical development and ongoing operations. As a result, we are not profitable and have incurred significant losses since our inception, with the exception of the year ended December 31, 2023, and negative cash flows from operating activities and capital expenditures and expect to continue to incur significant and increasing operating losses for at least the next several years. If our product candidates are not successfully developed and approved, we may never generate any significant revenue. Our net loss was $27.7 million for the year ended December 31, 2022 and net income was $4.2 million for the year ended December 31, 2023. For the six months ended June 30, 2024, our net loss was $30.6 million. As of June 30, 2024, we had an accumulated deficit of $77.2 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. All of our product candidates will require substantial additional development time and resources before we would be able to apply for or receive marketing approvals and begin generating revenue from product sales. We expect to continue to incur significant losses for the foreseeable future, and we expect that our expenses will increase substantially as we continue our development of, seek marketing approval for and potentially commercialize any of our product candidates, recruit and maintain key personnel and seek to identify, assess, acquire, in-license or develop additional product candidates.

Even if we succeed in developing and obtaining marketing approval for one or more of our current or future product candidates, we may never generate revenue that is significant enough to achieve profitability. If we do

achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis and we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. Our failure to become and remain profitable could decrease the value of our common stock and impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations.

Even if this offering is successful, we will require substantial additional funding in order to finance our operations. If we are unable to raise additional capital when needed on acceptable terms, or at all, we may be forced to delay, reduce, or terminate certain of our research and product development programs, future commercialization efforts or other operations.

The development of pharmaceutical product candidates, including conducting preclinical studies and clinical trials, is a very time-consuming, capital-intensive and uncertain process that takes years to complete. Our operations have consumed substantial amounts of cash since inception, and we expect our expenses to increase in connection with our ongoing activities, particularly as we identify, continue the research and development of, initiate and conduct clinical trials of, and seek regulatory approval for, SEP-786 and any additional product candidates we may identify. In addition, if we obtain regulatory approval for any product candidates we may identify, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing, and distribution to the extent that such sales, marketing, manufacturing, and distribution are not the responsibility of a collaborator. Because the outcome of any clinical trial or preclinical study is highly uncertain, we cannot reasonably estimate the actual amount of capital necessary to successfully complete the development and commercialization of our product candidates. Other unanticipated costs may also arise. Furthermore, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on acceptable terms, we would be forced to delay, reduce, or eliminate our research and product development programs, future commercialization efforts or other operations.

As of June 30, 2024, we had $155.7 million in cash, cash equivalents and marketable securities. We expect that the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities will enable us to fund our operating expenses and capital expenditure requirements into 2027. However, we have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of factors currently unknown to us, and we may need to seek funding sooner than planned. Our future capital requirements will depend on many factors, including:

- the timing and progress of research and development, preclinical and clinical development activities;
- the number, scope and duration of clinical trials required for regulatory approval of our current or future product candidates;
- the costs, timing, and outcome of regulatory review of any of our current or future product candidates in any jurisdictions in which we or our current or any future collaborators may seek approval for our current or future product candidates;
- the costs of manufacturing clinical and commercial supplies of our current or future product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our current or future product candidates for which we receive regulatory approval;
- the costs of preparing, filing and prosecuting our patent applications, maintaining and enforcing our patents and other intellectual property rights and defending intellectual property-related claims;
- our ability to maintain existing, and establish new, strategic collaborations, licensing or other arrangements, and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;

- our ability to establish and maintain collaboration and license agreements on favorable terms, if at all;
- the extent to which we acquire or in-license other product candidates and technologies;
- any product liability or other lawsuits related to our current or future product candidates;
- our implementation of various computerized informational systems and efforts to enhance operational systems;
- expenses incurred to attract, hire and retain skilled personnel;
- the costs of operating as a public company;
- our ability to establish a commercially viable pricing structure and obtain approval for coverage and adequate reimbursement from third-party and government payors;
- the extent to which we acquire or invest in businesses, products, and technologies;
- the effect of competing technological and market developments; and
- the impact of global economic uncertainty and geopolitical tensions, which may exacerbate the magnitude of the factors discussed above.

We expect our expenses to continue to increase in connection with our ongoing activities, particularly as we identify, continue the research and development of, initiate preclinical studies and clinical trials of, and seek marketing approval for, product candidates, and we may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, our current or future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, declaring dividends, and possibly other restrictions.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. We have no committed sources of additional capital and, if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our current or future product candidates or other research and development initiatives. Without sufficient funding, our license agreements and any future collaboration agreements may also be terminated if we are unable to meet the payment or other obligations under such agreements.

If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce, or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Additionally, if we raise funds through additional collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates we develop, or we may have to grant licenses on terms that may not be favorable to us and/or that may reduce the value of our common stock.

We have never generated revenue from product sales and may never be profitable.

Our ability to generate revenue from product sales and achieve profitability depends on our ability, alone or with collaborative partners, to successfully complete the development of, obtain the regulatory approvals

necessary to commercialize and eventually commercialize, product candidates we may identify for development. We may not generate revenues from product sales for many years, if ever. Our ability to generate future revenues from product sales depends heavily on our or our collaborators' ability to successfully:

- identify product candidates and successfully complete research and development of any product candidates we may identify;
- advance our product candidates through preclinical and clinical development, including as we advance SEP-786 into later-stage clinical trials;
- seek and obtain regulatory approvals for any product candidates for which we successfully complete clinical trials;
- launch and commercialize any product candidates for which we may obtain regulatory approval by establishing a sales force, marketing and distribution infrastructure, or alternatively, collaborating with a commercialization partner;
- qualify for adequate coverage and reimbursement by government and third-party payors for any product candidates for which we may obtain regulatory approval;
- establish and maintain supply and manufacturing relationships with third parties that can provide adequate, in both amount and quality, products and services to support clinical development and the market demand for any product candidates for which we obtain regulatory approval;
- develop, maintain and enhance a sustainable, scalable, reproducible and transferable manufacturing process for the product candidates we may develop;
- address competing technological and market developments;
- negotiate favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations in such collaborations;
- receive market acceptance by physicians, patients, healthcare payors, and others in the medical community;
- receive coverage and adequate reimbursement by healthcare payors;
- maintain, protect, enforce, defend and expand our portfolio of intellectual property and other proprietary rights, including patents, trade secrets and know-how;
- defend against third-party intellectual property claims of infringement, misappropriation or other violation; and
- attract, hire and retain qualified personnel.

Our expenses could increase beyond expectations if we are required by the FDA, European Medicines Agency (EMA), the competent authorities of individual European Union (EU) Member States, or other comparable foreign regulatory authorities to perform preclinical studies or clinical trials in addition to those that we currently anticipate. Even if one or more of the product candidates we may develop are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Additionally, such products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives. Even if we are able to generate revenues from the sale of any approved product candidates, we may not become profitable and may need to obtain additional funding to continue operations. Our failure to become and remain profitable may have an adverse effect on the value of our company and depress the market price of our common stock and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product candidate pipeline, achieve our strategic objectives or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Risks Related to Discovery, Development and Regulatory Approval of Product Candidates

We are early in our development efforts. We have only recently initiated early clinical studies, and as a result it will be years before we commercialize a product candidate, if ever. If we are unable to identify and advance product candidates through preclinical studies and clinical trials, obtain marketing approval and ultimately commercialize them, or experience significant delays in doing so, our business will be materially harmed.

The success of our business depends primarily upon our ability to identify, develop and commercialize product candidates. We are early in our development efforts and our lead product candidate, SEP-786, is in early clinical development and our other product candidates and development programs are in preclinical development or in the drug discovery stages. We have invested substantially all of our research efforts to date in developing our Native Complex Platform™, identifying potential product candidates and conducting preclinical and clinical studies. As an organization, we have limited experience in conducting and managing clinical trials necessary to obtain regulatory approvals, and we may be unable to do so for our product candidates. While we have successfully completed IND-enabling studies for SEP-786, our lead product candidate from our PTH1R program, and have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, PK, and PD of SEP-786, we have not yet completed any clinical trials for SEP-786 or any of our product candidates to date. Additionally, we have a portfolio of targets and programs that are in earlier stages of discovery or preclinical development and may never advance to clinical-stage development. If we are able to advance these other targets and programs into clinical development, we do not have experience managing multiple clinical trials simultaneously, working with global clinical trials, or working in multiple different disease indications. Our ability to achieve and sustain profitability depends on obtaining regulatory approvals for, and successfully commercializing our product candidates, either alone or with third parties, and we cannot guarantee you that we will ever obtain regulatory approval for any of our product candidates. Before obtaining regulatory approval for the commercial distribution of our product candidates, we must conduct extensive preclinical tests and clinical trials to demonstrate the safety and efficacy in humans of our product candidates.

We may not have the financial resources to continue development of, or the ability to enter into new collaborations for, a product candidate if we experience any issues that delay or prevent regulatory approval of, or our ability to commercialize, product candidates, including:

- preclinical study results may show the product candidate to be less effective than desired or to have harmful or problematic side effects;
- negative or inconclusive results from our clinical trials or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- product-related side effects experienced by patients in our clinical trials or by individuals using product similar to our product candidates;
- our third-party manufacturers' inability to successfully manufacture our products;
- inability of any third-party contract manufacturer to scale up manufacturing of our product candidates and those of our collaborators to supply the needs of clinical trials or commercial sales;
- delays in submitting INDs or other comparable foreign applications or delays or failures in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;
- preclinical studies conducted outside of the United States may be affected by tariffs or import/export restrictions imposed by the United States or other foreign governments;
- conditions imposed by the FDA, EMA or other comparable foreign regulatory authorities regarding the scope or design of our clinical trials;
- delays in enrolling patients in our clinical trials;

- high drop-out rates of our clinical trial patients;
- inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our clinical trials;
- inability to obtain alternative sources of supply for which we have a single source for product candidate components or materials;
- greater than anticipated costs of our clinical trials;
- manufacturing costs, formulation issues, pricing or reimbursement issues, or other factors that no longer make a product candidate economically feasible;
- harmful side effects or inability of our product candidates to meet efficacy endpoints during clinical trials;
- failure to demonstrate a benefit-risk profile acceptable to the FDA, EMA, or other comparable foreign regulatory authorities;
- unfavorable FDA, EMA, or other comparable foreign regulatory authority inspection and review of any of the clinical trial sites or manufacturing facilities used in the testing and manufacture of any of our product candidates;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or
- varying interpretations of our data by the FDA, EMA, and similar foreign regulatory authorities.

Our inability to complete development of, or commercialize our product candidates, or significant delays in doing so due to one or more of these factors, could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Preclinical and clinical drug development is a lengthy and expensive process, with uncertain timelines and outcomes. If preclinical studies or clinical trials of our product candidates are prolonged or delayed, we may be unable to obtain required regulatory approvals, and therefore be unable to commercialize our therapeutic candidates or any of our future therapeutic candidates on a timely basis or at all.

Successful development of pharmaceutical products involves a lengthy and expensive process, is highly uncertain, and is dependent on numerous factors, many of which are beyond our control. Product candidates that appear promising in the early phases of development may fail to reach the market for several reasons, including:

- clinical trial results may show the product candidates to be less effective than expected (for example, a clinical trial could fail to meet its primary or key secondary endpoint(s)) or have an unacceptable safety or tolerability profile;
- failure to receive the necessary regulatory approvals or a delay in receiving such approvals, which, among other things, may be caused by patients who fail the trial screening process, slow enrollment in clinical trials, patients dropping out of trials, patients lost to follow-up, length of time to achieve trial endpoints, additional time requirements for data analysis or New Drug Application (NDA) or similar foreign application preparation, discussions with the FDA, EMA or other comparable foreign regulatory authorities, including FDA, EMA or other comparable foreign regulatory authorities requesting additional preclinical or clinical data (such as long-term toxicology studies), or encountering unexpected safety or manufacturing issues;

- preclinical study results may show the product candidate to be less effective than desired or to have harmful on-target or off-target side effects;
- imposition of extensive post-marketing approval requirements; or
- the proprietary rights of others and their competing products and technologies that may prevent our product candidates from being commercialized.

Furthermore, the length of time necessary to complete clinical trials and submit an application for marketing approval for a final decision by a regulatory authority varies significantly from one product candidate to the next and from one country or jurisdiction to the next and may be difficult to predict. Even if we are successful in obtaining marketing approval, commercial success of any approved products will also depend in large part on the availability of coverage and adequate reimbursement from third-party payors, including government payors such as the Medicare and Medicaid programs and managed care organizations in the United States or country-specific governmental organizations in foreign countries, which may be affected by existing and future healthcare reform measures designed to reduce the cost of healthcare. Third-party payors could require us to conduct additional studies, including post-marketing studies related to the cost effectiveness of a product, to qualify for reimbursement, which could be costly and divert our resources. If government and other healthcare payors were not to provide coverage and adequate reimbursement for our products once approved, market acceptance and commercial success would be reduced. Even if we are able to obtain coverage and adequate reimbursement for our products once approved, there may be features or characteristics of our products, such as dose preparation requirements, that prevent our products from achieving market acceptance by the healthcare or patient communities.

In addition, if any of our product candidates receive marketing approval, we will be subject to significant regulatory obligations regarding the submission of safety and other post-marketing information and reports and registration, and will need to continue to comply (or ensure that our third-party providers comply) with current Good Manufacturing Practice (cGMPs) and Good Clinical Practice (GCPs) for any clinical trials that we conduct post-approval. In addition, there is always the risk that we, a regulatory authority or a third party might identify previously unknown problems with a product post-approval, such as AEs of unanticipated severity or frequency. Compliance with these requirements is costly, and any failure to comply or other issues with our product candidates post-approval could adversely affect our business, financial condition and results of operations.

We may encounter substantial delays in the commencement, enrollment or completion of our planned clinical trials or we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities, which could prevent us from commercializing any product candidates we determine to develop on a timely basis, if at all.

The risk of failure in developing product candidates is high. It is impossible to predict when or if any product candidate would prove effective or safe in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development, submit an IND or comparable foreign application to permit initiation of clinical studies, and then conduct extensive clinical trials to demonstrate the safety and efficacy of product candidates in humans. We have not yet completed a clinical trial of any product candidate.

Before we can commence clinical trials for a product candidate, we must complete extensive preclinical testing and studies that support our INDs and other regulatory filings. We cannot be certain of the timely identification of a product candidate or the completion or outcome of our preclinical testing and studies and cannot predict whether the FDA, EMA or other comparable foreign regulatory authorities will accept our proposed clinical programs or whether the outcome of our preclinical testing and studies will ultimately support the further development of any product candidates. Conducting preclinical testing is a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. As a result, we cannot be sure that we will

be able to submit INDs or other comparable foreign regulatory submissions for our preclinical programs on the timelines we expect, if at all, and we cannot be sure that submission of INDs will result in the FDA, EMA, or other comparable foreign regulatory authority allowing clinical trials to begin.

Furthermore, product candidates are subject to continued preclinical safety studies, which may be conducted concurrently with our clinical testing. The outcomes of these safety studies may delay the launch of or enrollment in future clinical trials and could impact our ability to continue to conduct our clinical trials.

Clinical testing is expensive, is difficult to design and implement, can take many years to complete and is uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, or at all. A failure of one or more clinical trials can occur at any stage of testing, which may result from a multitude of factors, including, but not limited to, flaws in trial design, dose selection issues, patient enrollment criteria and failure to demonstrate favorable safety or efficacy traits.

Other events that may prevent successful enrollment, initiation or timely completion of clinical development include:

- we may be unable to generate sufficient preclinical, toxicology or other *in vivo* or *in vitro* data to support the initiation of clinical trials;
- delays in reaching a consensus with applicable regulatory authorities on trial design or implementation;
- delays in obtaining regulatory authorization to commence a clinical trial;
- delays in reaching agreement on acceptable terms with prospective CROs, other vendors, or clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different vendors and trial sites;
- delays in obtaining approval from one or more institutional review boards (IRB) refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional participants, or withdrawing their approval of the trial;
- delays in recruiting suitable patients to participate in our ongoing and planned clinical trials;
- changes to the clinical trial protocol;
- clinical sites deviating from trial protocol such as the data collection omission we experienced at a clinical site as discussed above or dropping out of a trial;
- delays in manufacturing sufficient quantities of our product candidates for use in clinical trials, or delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for clinical trials;
- delays in having our product candidates being shipped on time, clearing customs and arriving at clinical trial sites intact;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- participants choosing an alternative treatment for the indication for which we are developing our product candidates, or participating in competing clinical trials;
- lack of adequate funding to continue a clinical trial;
- occurrence of AEs or serious adverse events (SAEs) associated with the product candidate that are viewed to outweigh its potential benefits;
- occurrence of SAEs in clinical trials of the same class of agents conducted by other companies;
- imposition of a temporary or permanent clinical hold by regulatory authorities;

- selection of clinical trial end points that require prolonged periods of clinical observation or analysis of the resulting data;
- clinical trials producing negative or inconclusive results;
- a facility manufacturing our product candidates or any of their components being ordered by the FDA or comparable foreign authorities to temporarily or permanently shut down due to violations of cGMP regulations or other applicable requirements, or contamination or cross-contaminations of product candidates in the manufacturing process;
- third-party clinical investigators losing the licenses or permits necessary to perform our clinical trials, not performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol or other regulatory requirements or committing fraud; or
- changes in regulatory requirements, guidance, or feedback from regulatory agencies that require amending or submitting new clinical protocols or otherwise modifying the design of our clinical trials.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs overseeing the conduct of such trials, by a Data Safety Monitoring Board for such trial or by the FDA, EMA, or other comparable foreign regulatory authorities. Such regulatory authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA, EMA, or other comparable regulatory foreign authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination and approval, which may impact the costs, timing or successful completion of a clinical trial.

Further, conducting clinical trials in foreign countries, as we may do for our product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocols as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory requirements, as well as political, currency exchange and other economic risks relevant to such foreign countries. Investigators and patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff which in turn could adversely impact our clinical trial operations. Additionally, we may experience interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel, quarantines or social distancing protocols imposed or recommended by federal or state governments, employers and others in connection with public health concerns. We may face delays in meeting our anticipated timelines for our ongoing and planned clinical trials, which could adversely affect our business, financial condition, results of operations and growth prospects.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue from future product sales and regulatory and commercialization milestones. In addition, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional testing to bridge our modified product candidate to earlier versions. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates, if approved, or allow our competitors to bring comparable products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

Serious adverse events, undesirable side effects or other unexpected properties of our product candidates may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our product candidates or, if discovered following marketing approval, revocation of marketing authorizations or limitations on the use of our product candidates, any of which would limit the commercial potential of such product candidate.

To date, we have not completed the evaluation of any product candidates in human clinical trials. It is impossible to predict when or if any product candidates we may develop will ultimately prove safe in humans. As is the case with pharmaceuticals generally, it is likely that there may be side effects and adverse events associated with our product candidates' use. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. Regulatory authorities may draw different conclusions or require additional testing to confirm these determinations, if they occur. In addition, it is possible that as we test our product candidates in larger, longer and more extensive clinical trials with a broader group of patients, or as use of these product candidates becomes more widespread if they receive marketing approval, illnesses, injuries, discomforts and other AEs that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by participants. Many times, side effects are only detectable after investigational product candidates are tested in large-scale, Phase 3 trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that any of our current or future product candidates has serious or life-threatening side effects or other side effects that outweigh the potential therapeutic benefit, the development of the product candidate may fail or be delayed, or, if the product candidate has received marketing approval, such approval may be revoked, which would harm our business, prospects, operating results and financial condition. In particular, because we are developing our product candidates for chronic indications, the FDA, EMA, and other comparable foreign regulatory authorities will likely require that our product candidates demonstrate a higher level of safety over a longer period of time than would be the case for product candidates intended for short-term use. Moreover, if we elect, or are required, to delay, suspend or terminate any clinical trial of our product candidates, the commercial prospects of our product candidates may be harmed and our ability to generate revenue through their sale may be delayed or eliminated. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if our product candidates are associated with undesirable side effects in clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial value for the product candidate if approved. We may also be required to modify our trial plans based on findings after we commence our clinical trials. Many compounds that initially showed promise in early-stage testing have later been found to cause side effects that prevented further development of the compound.

In addition, if any of our product candidates receive marketing approval, the FDA could require us to include a boxed warning in our label or adopt a REMS, to ensure that the benefits outweigh its risks, which may include, among other things, a medication guide outlining the risks of the drug for distribution to patients and a communication plan to health care practitioners. For example, the FDA required that the product label for NATPARA, an approved, injectable parathyroid hormone product targeting PTH1R for the management of hypoparathyroidism include a boxed warning related to the risk of osteosarcoma based on rodent carcinogenicity studies and also implemented a REMS Program to ensure patients and prescribers were appropriately counseled on the benefits and risks of the drug. Similarly, the FDA initially included boxed warnings for FORTEO and TYMLOS, injectable PTH peptides approved for osteoporosis due to the risk of osteosarcoma. While we have not yet conducted carcinogenicity studies for SEP-786, because it also targets PTH1R, it is possible that absent compelling data to the contrary, the FDA, EMA, and other comparable foreign regulatory authorities will similarly require a boxed warning for SEP-786 if it is approved for marketing. Furthermore, if we or others later identify undesirable side effects caused by our product candidates, several other potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;

- regulatory authorities may require additional warnings on the label, including "boxed" warnings, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients;
- we could be subject to fines, injunctions, or the imposition of criminal or civil penalties;
- we may need to conduct a recall;
- we may be forced to suspend marketing of that product, or decide to remove the product from the marketplace; and
- the product may become less competitive, and our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our product candidates and could significantly harm our business, prospects, financial condition and results of operations.

Our product candidates are subject to extensive regulation and compliance obligations, which is costly and time-consuming and which may cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.

The research, clinical development, testing, quality control, safety, effectiveness, manufacturing, labeling, packaging, storage, record-keeping, advertising, promotion, marketing, import, export, distribution, post-approval monitoring, and post-approval reporting of our product candidates are subject to extensive regulation by the FDA in the United States and by comparable foreign regulatory authorities in foreign markets. In the United States, neither we nor any future collaborators are permitted to market our product candidates until we receive regulatory approval from the FDA. The process of obtaining regulatory approval is expensive, often takes many years following the commencement of clinical trials and can vary substantially based upon the type, complexity and novelty of the product candidates involved, as well as the target indications and patient population. Approval policies or regulations may change, new relevant statutes or regulations may be enacted, and the FDA, EMA and other comparable foreign regulatory authorities have substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. Despite the time and expense invested in clinical development of product candidates, regulatory approval is never guaranteed.

Prior to obtaining approval to commercialize a product candidate in the United States or abroad, we or our potential future collaborators must demonstrate with substantial evidence from adequate and well-controlled clinical trials, and to the satisfaction of the FDA, EMA or other comparable foreign regulatory authorities, that such product candidates are safe and effective for their intended uses. Results from preclinical studies and clinical trials can be interpreted in different ways. Even if we believe the preclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA, EMA and other comparable foreign regulatory authorities, which could require us to delay or abandon clinical development plans. In addition, regulatory authorities may require us to conduct further preclinical studies before evaluating our product candidate in a clinical trial. Once we initiate clinical trials, the FDA, EMA, or other comparable foreign regulatory authorities may require additional clinical trials or suggest changes to our planned clinical trials, prior to and in support of the approval of a NDA or equivalent foreign marketing application. Changes to data requirements by the FDA, EMA, or other comparable foreign regulatory authorities during the development of our product candidates may cause the applicable regulatory authorities to require us to conduct additional preclinical studies or clinical trials for our product candidates either prior to or post-approval, or regulatory authorities may object to elements of our clinical development program.

The FDA, EMA or other comparable foreign regulatory authorities can delay, limit or deny approval of a product candidate for many reasons, including:

- such authorities may disagree with the design or implementation of our clinical trials;

- negative or ambiguous results from our clinical trials or results may not meet the level of statistical significance required by the FDA, EMA or other comparable foreign regulatory authorities for approval;
- serious and unexpected drug-related side effects may be experienced by participants in our clinical trials or by individuals using drugs similar to our product candidates;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- such authorities may not accept clinical data from trials which are conducted at clinical facilities or in countries where the standard of care is potentially different from that of the United States;
- we may be unable to demonstrate that a product candidate is safe and effective, and that a product candidate's clinical and other benefits outweigh its safety risks;
- such authorities may disagree with our interpretation or analysis of data from preclinical studies or clinical trials; such authorities may not agree that the data collected from clinical trials of our product candidates are acceptable or sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere, and such authorities may impose requirements for additional preclinical studies or clinical trials;
- such authorities may disagree regarding the formulation, labeling and/or the specifications of our product candidates;
- approval may be granted only for indications that are significantly more limited than what we apply for and/or with other significant restrictions on distribution and use;
- such authorities may find deficiencies in the manufacturing processes, approval policies or facilities of our third-party manufacturers with which we or any of our current or future collaborators contract for clinical and commercial supplies; or
- the approval policies or regulations of such authorities may significantly change in a manner rendering our or any of our potential future collaborators' clinical data insufficient for approval.

With respect to foreign markets, approval procedures vary among countries and, in addition to the foregoing risks, may involve additional product testing, administrative review periods and agreements with pricing authorities. In addition, events raising questions about the safety of certain marketed pharmaceuticals may result in increased cautiousness by the FDA, EMA, and other comparable foreign regulatory authorities in reviewing new drugs based on safety, efficacy or other regulatory considerations and may result in significant delays in obtaining regulatory approvals. Any delay in obtaining, or inability to obtain, applicable regulatory approvals would prevent us or any of our potential future collaborators from commercializing our product candidates.

Of the large number of drugs in development, only a small percentage successfully complete the FDA, EMA, or foreign regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, financial condition, results of operations and prospects.

Enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside our control, which could adversely affect our business, operating results and prospects.

Patient enrollment and retention in clinical trials is a significant factor in the timing of clinical trials and depends on many factors, including the size and nature of the patient population, the nature of the trial protocol, the existing body of safety and efficacy data with respect to the study drug, the number, nature and duration of

competing treatments and ongoing clinical trials of competing drugs for the same indication, the proximity of patients to clinical trial sites and the eligibility criteria for the clinical trial. As we progress our programs we may not be able to initiate or continue clinical trials for any product candidates we identify or develop if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA, EMA, or other comparable foreign authorities, or as needed to provide appropriate statistical power for a given trial. For certain of our product candidates, the conditions which we may evaluate include rare diseases with limited patient pools from which to draw. In some cases, patient populations for rare diseases are located at specific academic sites focused on such indications, often with multiple competing clinical trials. Potential patients for any planned clinical trials may not be adequately diagnosed or identified with the diseases which we are targeting or may not meet the entry criteria for such trials. We also may encounter difficulties in identifying and enrolling patients with a stage of disease appropriate for our planned clinical trials and monitoring such patients adequately during and after treatment. As noted above, other pharmaceutical companies targeting these same diseases are recruiting clinical trial patients from these patient populations, which may make it more difficult to fully enroll our clinical trials. In addition, the process of finding and diagnosing patients may prove costly.

The eligibility criteria of our clinical trials, once established, may further limit the pool of available trial participants. If the actual number of patients with these diseases is smaller than we anticipate, we may encounter difficulties in enrolling patients in our clinical trials, thereby delaying or preventing development and approval of our product candidates. Even once enrolled we may be unable to retain a sufficient number of patients to complete any of our trials.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion. We may experience difficulties in patient enrollment or retention in our clinical trials for a variety of reasons. Patient enrollment and retention in clinical trials depends on many factors, including:

- the size and nature of the patient population, in particular for rare diseases such as the diseases on which we are focused initially, and process for identifying patients;
- the severity of the disease under investigation;
- the design of the trial protocol;
- the existing body of safety and efficacy data for the product candidate;
- the number and nature of competing treatments and ongoing clinical trials of competing therapies for the same indication;
- the proximity and availability of clinical trial sites for patients;
- the eligibility criteria for the trial;
- the complexity of the trial, including number of office visits, lab tests, patient evaluations, and dosing regimens;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the ability to adequately monitor patients during a trial, clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied;
- the risk that enrolled patients will drop out of a trial before completing all site visits; and
- clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies.

Furthermore, our efforts to build relationships with patient communities may not succeed, which could result in delays in patient enrollment in our clinical trials. In addition, any negative results we may report in

clinical trials of our product candidate may make it difficult or impossible to recruit and retain patients in other clinical trials of that same product candidate. Delays or failures in planned patient enrollment or retention may result in increased costs, program delays or both, which could have a harmful effect on our ability to develop our product candidates, or could render further development impossible. Further, if patients drop out of our clinical trials, miss scheduled doses or follow-up visits, or otherwise fail to follow clinical trial protocols, the integrity of data from our clinical trials may be compromised or not accepted by the FDA, EMA, or other comparable foreign regulatory authorities, which would represent a significant setback for the applicable program. In addition, we may rely on CROs and clinical trial sites to ensure proper and timely conduct of our future clinical trials and, while we intend to enter into agreements governing their services, we will be limited in our ability to compel their actual performance. Such delays or failures could adversely affect our business, operating results and prospects.

Even if we receive regulatory approval of any product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA, EMA and other comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations and applicable product tracking and tracing requirements. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, other marketing application and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. Certain endpoint data we hope to include in any approved product labeling also may not make it into such labeling, including exploratory or secondary endpoint data such as patient-reported outcome measures. The FDA may also require a risk evaluation and mitigation strategies (REMS) program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA, EMA or other comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our product candidates, including adverse events (AEs) of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information,
imposition of post-market studies or clinical trials to assess new safety risks or imposition of distribution

restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or withdrawal of approvals;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

Additionally, under the Food and Drug Omnibus Reform Act (FDORA) sponsors of approved drugs and biologics must provide six months' notice to the FDA of any changes in marketing status, such as the withdrawal of a drug, and failure to do so could result in the FDA placing the product on a list of discontinued products, which would revoke the product's ability to be marketed. The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. The policies of the FDA, EMA and other comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. In addition, the U.S. Supreme Court's July 2024 decision to overturn established case law giving deference to regulatory agencies' interpretations of ambiguous statutory language has introduced uncertainty regarding the extent to which the FDA's regulations, policies and decisions may become subject to increasing legal challenges, delays, and/or changes. As a result of the Supreme Court's decision, the FDA and other agencies may be less inclined to engage in formal regulation and may rely to a greater degree on informal guidance, which may not always be susceptible to immediate challenge. We cannot predict the likelihood, nature or extent of government regulation or guidance that may arise from future court decisions, legislation, or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or guidance or the adoption of new requirements, guidance, or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of our therapeutics may be delayed and, as a result, our stock price may decline.

From time to time, we estimate the timing of the anticipated accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include our expectations regarding the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones, such as the completion of an ongoing clinical trial or the initiation of other clinical programs. All of these milestones are and will be based on numerous assumptions, including:

- our available capital resources or capital constraints we experience;
- the rate of progress, costs and results of our clinical trials and research and development activities, including the extent of scheduling conflicts with participating clinicians and collaborators;
- our ability to identify and enroll patients who meet clinical trial eligibility criteria;
- our receipt of approvals by the FDA, EMA, and other comparable foreign regulatory authorities and the timing thereof;
- other actions, decisions or rules issued by regulators;
- our ability to access sufficient, reliable and affordable supplies of materials used to manufacture our product candidates;

- the efforts of our collaborators with respect to the commercialization of our product candidates;
- the securing of, costs related to, and timing issues associated with, product manufacturing as well as sales and marketing activities; and
- securing product reimbursement.

The actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control. If we do not meet these milestones as publicly announced, or at all, the commercialization of our product candidates may be delayed or never achieved and, as a result, our stock price may decline.

Results of preclinical studies and early clinical trials on any of our product candidates may not be predictive of results of future clinical trials.

The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in early-stage development, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in preclinical studies and clinical trials, including previously unreported adverse events. In addition, while the animal models used in preclinical studies are designed to be representative of disease states in humans, these preclinical models may not be able to accurately predict the way a product candidate will affect patients in clinical trials. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support regulatory approval. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their product candidates.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen, product formulation and other clinical trial protocols and the rate of dropout among clinical trial patients. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

We have limited financial and managerial resources, and to date, we have focused on research programs and product candidates within the endocrinology, immunology and inflammation, neurology and metabolic therapeutic areas, with a particular focus on our lead product candidate, SEP-786. Correctly prioritizing our research and development activities is particularly important for us due to the breadth of potential product candidates and indications that we believe could be pursued by leveraging our Native Complex Platform™. As a result, we may forgo or delay pursuit of opportunities with other product candidates or in other therapeutic areas that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to timely capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain

sole development and commercialization rights to such product candidate. We must continually assess the potential commercial viability of our research programs and product candidates, and we may decide to pause or discontinue development of any of our product candidates based upon such assessments, even if we obtain positive data from our product candidates in preclinical studies and clinical trials.

Our proprietary Native Complex Platform™ is based on novel technologies that are unproven and may not result in approvable or marketable products, which exposes us to unforeseen risks and makes it difficult for us to predict the time and cost of product development and potential for regulatory approval, and we may not be successful in our efforts to expand our development portfolio of product candidates.

A key element of our strategy is to use our proprietary Native Complex Platform™ to overcome the historical limitations of G protein-coupled receptor (GPCR) drug development, including the isolation, purification and stabilization of GPCRs in their native forms, in order to build a robust and diverse portfolio of potentially first-in-class and best-in-class oral small molecule therapies that address both well-validated and novel GPCR targets.

We have only recently commenced our first clinical trial of the first candidate developed with our platform. The scientific research that forms the basis of our efforts to develop product candidates with our platform is still ongoing. We are not aware of any FDA approved therapeutics utilizing the technology underlying our platform. Further, the scientific evidence to support the feasibility of developing therapeutic treatments based on our platform is both preliminary and limited. As a result, we are exposed to a number of unforeseen risks and it is difficult to predict the types of challenges and risks that we may encounter during development of our product candidates. For example, we have not yet generated any meaningful clinical data on any of the product candidates being developed using our platform, and our current data is limited to animal models and preclinical cell lines, the results of which may not translate into humans. Further, relevant animal models and assays may not accurately predict the safety and efficacy of our product candidates in humans, and we may encounter significant challenges creating appropriate models and assays for demonstrating the safety and purity of our product candidates.

Given the novelty of our technology, we intend to work closely with the FDA and comparable foreign regulatory authorities to perform the requisite scientific analyses and evaluation of our methods to obtain regulatory approval for our product candidates; however, due to a lack of comparable experiences, the regulatory pathway with the FDA and comparable regulatory authorities may be more complex and time-consuming relative to other more well-known therapeutics. Even if we obtain human data to support our product candidates, the FDA or comparable foreign regulatory authorities may lack experience in evaluating the safety and efficacy of product candidates like those developed using our platform, which could result in a longer than expected regulatory review process, increase our expected development costs, and delay or prevent commercialization of our product candidates. We cannot be certain that our approach will lead to the development of approvable or marketable products, alone or in combination with other therapies.

Although our research and development efforts to date have resulted in a development portfolio of potential programs and product candidates, we may not be able to discover or identify novel chemical matter to new GPCR targets and thus not be able to develop product candidates to expand our development portfolio. We may also pursue opportunities to acquire or in-license additional businesses, technologies or products, form strategic alliances or create joint ventures with third parties to complement or augment our existing business. However, we may not be able to identify any product candidates through such acquisition or in-license.

Even if we are successful in continuing to build and expand our development portfolio, the potential product candidates that we identify may not be suitable for clinical development. For example, they may be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be drugs that will be successful in clinical trials or receive marketing approval and achieve market acceptance. If we do not

successfully develop and commercialize product candidates, we will not be able to obtain drug revenues in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price.

Preliminary, topline and interim data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose interim, preliminary or topline data from our preclinical studies and planned clinical trials, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the topline or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Topline and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the topline or preliminary data we previously made public. As a result, topline and preliminary data should be viewed with caution until the final data are available. From time to time, we may also disclose interim data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between topline, preliminary or interim data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product, product candidate or our business. If the topline or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

We may develop our current or future product candidates in combination with other therapies, which would expose us to additional risks.

We may develop our current or potential future product candidates in combination with one or more currently approved therapies or therapies in development. Even if any of our current or future product candidates were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risks that the FDA, EMA or other comparable foreign regulatory authorities could revoke approval of the therapy used in combination with any of our product candidates, or safety, efficacy, manufacturing or supply issues could arise with these existing therapies. In addition, it is possible that existing therapies with which our product candidates are approved for use could themselves fall out of favor or be relegated to later lines of treatment. This could result in the need to identify other combination therapies for our product candidates or our own products being removed from the market or being less successful commercially.

We may also evaluate our current or future product candidates in combination with one or more other therapies that have not yet been approved for marketing by the FDA, EMA or other comparable foreign

regulatory authorities. We will not be able to market and sell any product candidate in combination with any such unapproved therapies that do not ultimately obtain marketing approval.

Furthermore, we cannot be certain that we will be able to obtain a steady supply of such therapies for use in developing combinations with our product candidates on commercially reasonable terms or at all. Any failure to obtain such therapies for use in clinical development and the expense of purchasing therapies in the market may delay our development timelines, increase our costs and jeopardize our ability to develop our product candidates as commercially viable therapies. If the FDA, EMA or other comparable foreign regulatory authorities do not approve or withdraw their approval of these other therapies, or if safety, efficacy, commercial adoption, manufacturing or supply issues arise with the therapies we choose to evaluate in combination with any of our current or future product candidates, we may be unable to obtain approval of or successfully market any one or all of the current or future product candidates we develop. Additionally, if the third-party providers of therapies or therapies in development used in combination with our current or future product candidates are unable to produce sufficient quantities for clinical trials or for commercialization of our current or future product candidates, or if the cost of combination therapies are prohibitive, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

Risks Related to Commercialization, Marketing and Competition

We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may invest significant resources to develop these capabilities. If we are unable to establish marketing, sales or distribution capabilities or enter into agreements with third parties to market and sell our products, we may not be able to generate product revenue.

We have no internal sales, marketing or distribution capabilities, nor have we as a company commercialized a product. If any of our product candidates ultimately receives marketing approval, we will be required to build a marketing and sales organization with technical expertise and supporting distribution capabilities to commercialize each such product in the markets that we target, which will be expensive and time consuming, or collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. We have no prior experience as a company in the marketing, sale and distribution of pharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Furthermore, we are currently developing products for multiple indications in different medical specialties, which will require us to build different sales and marketing capabilities that are tailored to a given product or medical specialty. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions on acceptable financial terms, or at all. In addition, our product revenues and our profitability, if any, may be lower if we rely on third parties for these functions than if we were to market, sell and distribute any products that we develop ourselves. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we are not successful in commercializing our products, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

Even if any of our current or future product candidates receive marketing approval, such product candidate may fail to achieve market acceptance by physicians, patients, third-party payors or others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

We have never commercialized a product, and even if any of our current or future product candidates are approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. Historically, several injectable PTH peptides have been approved by the FDA and other regulatory authorities for treatment of hypoparathyroidism and osteoporosis. However, our lead product candidate is an oral small molecule agonist; to date, no such oral small molecule in this indication has been approved by the FDA or any other regulatory agency. Market participants with significant influence over acceptance of new treatments, such as clinicians and third-party payors, may not adopt new oral treatments for hypoparathyroidism or osteoporosis, and we may not be able to convince the medical community and third-party payors to accept and use, or to provide favorable reimbursement for, any product candidates developed by us or our existing or future collaborators. If our current or future product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenue and may not become profitable. The degree of market acceptance of our current or future product candidates, if approved for commercial sale, will depend on a number of factors, including but not limited to:

- the clinical indications and patient populations for which the product candidate is approved;
- the safety, efficacy and potential advantages compared to alternative treatments and therapies;
- the timing of market introduction of the product as well as competitive products;
- effectiveness of sales and marketing efforts;
- the strength of our relationships with patient communities;
- the cost of treatment in relation to alternative treatments and therapies, including any similar generic treatments;
- our ability to offer such product for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments and therapies;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the availability of third-party coverage and adequate reimbursement;
- the willingness of patients to pay out-of-pocket in the absence of coverage and adequate reimbursement by third-party payors and government authorities;
- the strength of marketing and distribution support;
- the inclusion of any REMS program or other restrictions included by the regulators;
- the prevalence and severity of any side effects; and
- any restrictions on the use of the product together with other medications.

Our efforts to educate physicians, patients, third-party payors and others in the medical community on the benefits of our product candidates may require significant resources and may never be successful. Because we expect sales of our product candidates, if approved, to generate substantially all of our revenues for the foreseeable future, the failure of our product candidates, if approved, to find market acceptance would harm our business and could require us to seek additional financing.

Even if we are able to commercialize any product candidate, the third-party payor coverage and reimbursement status of newly-approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for our product candidates could limit our ability to market those products and decrease our ability to generate revenue.

The availability and adequacy of coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid, private health insurers and other third-party payors in the United States are essential for most patients to be able to afford treatments such as our products or product candidates, if approved. Our ability to achieve acceptable levels of coverage and reimbursement for drug treatments by governmental authorities, private health insurers and other organizations will have an effect on our ability to successfully commercialize our products, and potentially attract additional collaboration partners to invest in the development of our product candidates. We cannot be sure that adequate coverage and reimbursement in the United States, the EU, Australia or elsewhere will be available for our products or any products that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future. For more information, see the section titled "Business–Government Regulation–Coverage and Reimbursement."

Third-party payors increasingly are challenging prices charged for pharmaceutical products, medical devices and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs when an equivalent generic drug is available. It is possible that a third-party payor may consider our products or product candidates, if approved, and the generic or biosimilar parent drug as substitutable and only offer to reimburse patients for the generic drug. Even if we show improved efficacy or safety or improved convenience of administration with our products or product candidates, if approved, pricing of the existing parent drug may limit the amount we will be able to charge for such product. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our products or product candidates, and may not be able to obtain a satisfactory financial return on products that we may develop.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, third-party payors, including private and governmental payors, such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs, biologics and medical devices will be covered. The Medicare and Medicaid programs increasingly are used as models for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs, biologics and medical devices. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our products or product candidates.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of our products and product candidates, if approved, and on related parent drugs. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Many countries, including the EU Member States, established complex and lengthy procedures to obtain price approvals, coverage and reimbursement. These procedures vary from country to country but are commonly initiated after grant of the related marketing authorization. More particularly, in the EU, potential reductions in prices and changes in reimbursement levels could be the result of different factors, including reference pricing systems. It could also result from the application of external reference pricing mechanisms, which consist of arbitrage between low-priced and high-priced countries. Reductions in the pricing of our medicinal products in one EU Member State could affect the price in other EU Member States and, thus, have a negative impact on our financial results. Other countries allow companies to fix their own prices for medical products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our products or product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits. As an example, many EU Member States
review periodically their decisions concerning the pricing and reimbursement of medicinal products. The

outcome of these reviews cannot be predicted and could have adverse effects on the pricing and reimbursement of our medicinal products in the EU Member States.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our products or product candidates. We expect to experience pricing pressures in connection with the sale of our products and product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs, medical devices and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than us.

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on proprietary and novel products and product candidates. While we believe our product candidates, platform, knowledge, experience and scientific personnel provide us with several key competitive advantages, we face competition from major pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions, among others. Our future success will depend in part on our ability to maintain a competitive position with our structure-based drug discovery platform. If we fail to stay at the forefront of technological change in utilizing our platform to create and develop product candidates, we may be unable to compete effectively. Our competitors may render our approach obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and platform. Several other companies also focus on GPCRs and have platform technologies that are distinct from the Native Complex Platform™, including Nxera Pharma (formerly Sosei Heptares), Structure Therapeutics, Tectonic Therapeutics, and Confo Therapeutics.

In addition, we face competition with respect to our current product candidates and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are several large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the indications that we are pursuing. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

We are aware of several pharmaceutical companies that have commenced clinical trials of product candidates or have successfully commercialized products addressing areas that we are targeting. Takeda owns the rights to parathyroid hormone product (brand name NATPARA) for the treatment of hypoparathyroidism. NATPARA was voluntarily recalled due to manufacturing issues in September 2019 in the United States and is now only available to a limited number of patients through a Special Use Program offered by its manufacturer. In October 2022, Takeda announced manufacturing of all strengths of NATPARA will be discontinued globally by the end of 2024. Ascendis Pharma received regulatory approval for a proprietary once-daily injectable PTH peptide, palopegteriparatide (brand name YORVIPATH), in Europe and the United States. In March 2024, AstraZeneca acquired Amolyt Pharma, who was developing eneboparatide, a proprietary, once-daily injectable PTH peptide, for hypoparathyroidism, currently in Phase 3 studies. In addition, we are aware of several academic groups and companies working on making longer-acting agonists of the PTH1R. Other companies and groups are developing or commercializing therapies for hypoparathyroidism, including Calcilytix (a BridgeBio company), Entera Bio, Extend Biosciences, and MBX Biosciences. Several companies are developing clinical-stage small molecule MRGPRX2 inhibitors, including Escient Pharmaceuticals (acquired by Incyte Pharmaceuticals in April

2024), Evommune, and BioArdis. Further there are several other companies pursuing therapies for CSU addressing other receptors of interest, such a Genentech, Sanofi, Celldex Therapeutics, Jasper Therapeutics, Acelyrin, Allakos, Novartis, Third Harmonic Bio, and Blueprint Medicines. For TSHR, we are aware that Byondis and Crinetics are also working on research stage compounds, but they have not yet entered clinical development. In addition several companies are working on other mechanisms to address Graves' disease, such as Immunovant, and TED, including Amgen, Viridian, Argenx, Roche, Lassen Therapeutics, Tourmaline Bio, Sling Therapeutics, and Acelyrin. There are also several currently approved injectable products targeting incretin receptors for the treatment of obesity or T2D. These include, but are not limited to, products such as Ozempic and Wegovy (semaglutide, each marketed by Novo Nordisk) for T2D and obesity, respectively, Trulicity (dulaglutide, marketed by Eli Lilly and Company) for T2D, and Mounjaro and Zepbound (tirzepatide, each marketed by Eli Lilly and Company) for T2D and obesity, respectively. There are also several injectable peptide products in development pursuing similar indications with similar mechanism of actions along with combination products, including those being developed by Amgen, AstraZeneca, Boehringer Ingelheim, Eli Lilly and Company, Novo Nordisk, Roche, and Viking, among others. In addition, there are oral products such as Rybelsus (semaglutide, marketed by Novo Nordisk) approved for patients with T2D and other oral products in development for treating obesity or T2D, including those being developed by AstraZeneca, Eli Lilly and Company, Pfizer, Roche, Structure, and Terns. Based on our continuing evaluations of the competitive landscape, we may decide to reallocate resources and reprioritize our development programs if we determine that a particular product candidate or target indication is no longer commercially viable or advantageous.

Many of our competitors, either alone or with their collaborators, have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the timing and scope of marketing approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, more convenient, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. If we are unable to compete effectively, our opportunity to generate revenue from the sale of our products we may develop, if approved, could be adversely affected.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Any failure to compete effectively could harm our business, financial condition and operating results.

EU drug marketing and reimbursement regulations may materially affect our ability to market and receive coverage for our products in the EU Member States.

We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions, including the EU. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of products is subject to governmental control and other market regulations which could put pressure on the pricing and usage of our product candidates. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for our product candidates and may be affected by existing and future healthcare reform measures.

Much like the federal Anti-Kickback Statute prohibition in the United States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the EU. The provision of benefits or advantages to reward improper performance is typically governed by the national anti-bribery laws of EU Member States and the Bribery Act 2010 in the United Kingdom. Infringement of these laws could result in substantial fines and imprisonment. EU Directive 2001/83/EC, which is the EU Directive governing medicinal products for human use, further provides that, where medicinal products are being promoted to persons qualified to prescribe or supply them, no gifts, pecuniary advantages or benefits in kind may be supplied, offered or promised to such persons unless they are inexpensive and relevant to the practice of medicine or pharmacy. This provision has been transposed into the Human Medicines Regulations 2012 and so remains applicable in the United Kingdom despite its departure from the EU.

Payments made to physicians in certain EU Member States must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual EU Member States. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the EU Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

In addition, in some foreign countries, including some countries in the EU, the proposed pricing for a product must be approved before it may be lawfully marketed. The requirements governing product pricing and reimbursement vary widely from country to country. For example, some EU Member States have the option to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. Reference pricing used by various EU Member States and parallel distribution, or arbitrage between low-priced and high-priced EU Member States, can further reduce prices. An EU Member State may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. In some countries, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of any of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our product candidates. Historically, products launched in the EU do not follow price structures of the United States and generally prices tend to be significantly lower. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If pricing is set at unsatisfactory levels or if reimbursement of our products is unavailable or limited in scope or amount, our revenues from sales and the potential profitability of any of our product candidates in those countries would be negatively affected.

Obtaining and maintaining marketing approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining marketing approval of our product candidates in other jurisdictions.

Obtaining and maintaining marketing approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain marketing approval in any other jurisdiction. For example, even if the FDA grants marketing approval of a product candidate, it does not mean that comparable foreign regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and reimbursement of the product candidate in those countries. However, a failure or delay in obtaining marketing approval in one jurisdiction may negatively impact the marketing approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Obtaining foreign marketing approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we or any future collaborator fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed, which would adversely affect our business, prospects, financial condition, and results of operations.

Our future growth may depend, in part, on our ability to commercialize products in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize our product candidates in foreign markets. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from applicable regulatory authorities in foreign markets, and we may never receive such regulatory approvals for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements regarding safety and efficacy and governing, among other things, clinical trials, manufacturing, commercial sales, pricing and distribution of our product candidates. If we obtain regulatory approval of our product candidates and ultimately commercialize our products in foreign markets, we would be subject to additional risks and uncertainties, including:

- different regulatory requirements for approval of drugs in foreign countries;
- reduced protection for intellectual property rights;
- the existence of additional third-party patent rights of potential relevance to our business;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- foreign reimbursement, pricing and insurance regimes;
- workforce uncertainty in countries where labor unrest is common;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires; and
- business interruptions resulting from pandemics or similar public health crises.

If the market opportunities for any of our product candidates are smaller than we estimate, even assuming approval of a product candidate, our revenue may be adversely affected, and our business may suffer.

The precise incidence and prevalence for all the conditions we aim to address with our product candidates are unknown. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations or market research, and may prove to be incorrect. Further, new information may change the estimated incidence or prevalence of these diseases. The total addressable market across all of our product candidates will ultimately depend upon, among other things, the diagnosis criteria included in the final label for each of our product candidates approved for sale for these

indications, the availability of alternative treatments and the safety, convenience, cost and efficacy of our product candidates relative to such alternative treatments, acceptance by the medical community and patient access, drug pricing and reimbursement. The number of patients in the United States and other major markets and elsewhere may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business.

Risks Related to Business Operation and Industry

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the timing, degree of success and cost of, and level of investment in, research, development, regulatory approval and commercialization activities relating to our product candidates, which may change from time to time;
- coverage and reimbursement policies with respect to our product candidates, if approved, and potential future drugs that compete with our products;
- the cost of manufacturing our current and future product candidates, which may vary depending on FDA, EMA or other comparable foreign regulatory authority guidelines and requirements, the quantity of production and the terms of our agreements with third-party manufacturers;
- expenditures that we may incur to acquire, develop or commercialize additional product candidates and technologies or other assets;
- the level of demand for any of our product candidates, if approved, which may fluctuate significantly and be difficult to predict;
- our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- future accounting pronouncements or changes in our accounting policies;
- the timing and success or failure of preclinical studies or clinical trials or regulatory approval for our product candidates or any competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- any intellectual property infringement lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- potential unforeseen business disruptions that increase our costs or expenses;
- effects of macro events, such as inflation, geopolitical conflicts, pandemics, natural disasters and supply chain issues, on our business and operations; and
- the changing and volatile global economic and political environment.

In addition, from time to time, we may enter into license or collaboration agreements or strategic partnerships with other companies that include development funding and significant upfront and milestone payments and/or royalties, which may become an important source of our revenue. These upfront and milestone payments may vary significantly from period to period and any such variance could cause a significant fluctuation in our operating results from one period to the next.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

We expect to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of June 30, 2024, we had 68 full-time employees. As we advance our research and development programs, we may need to further increase the number of our employees and the scope of our operations, particularly in the areas of clinical development, biology, chemistry, manufacturing, general and administrative matters related to being a public company, regulatory affairs and, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must:

- expand our general and administrative functions;
- identify, recruit, integrate, maintain and motivate additional qualified personnel;
- manage our development efforts effectively, including the initiation and conduct of clinical trials for our product candidates;
- establish and build a marketing and commercial organization; and
- improve our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to develop, manufacture and commercialize our product candidates, if approved, will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert financial and other resources, and a disproportionate amount of its attention away from day-to-day activities, to managing these growth activities.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

We are highly dependent on the services of our senior management team and if we are not able to retain these members of our management team and recruit and retain additional management, clinical and scientific personnel, our business will be harmed.

We are highly dependent on our senior management team. In particular, we are highly dependent on the development and management expertise of Jeffrey Finer, M.D., Ph.D., our Chief Executive Officer, as the other principal members of our management, scientific and clinical team. The employment agreements we have with these officers do not prevent such persons from terminating their employment with us at any time. The loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives. In addition, we will need to attract, retain and motivate highly qualified additional management, clinical and scientific personnel. If we are not able to retain our management and to attract, on terms acceptable to us, additional qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow.

We may not be able to attract or retain qualified personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses. Many of the other pharmaceutical companies that we compete against for qualified personnel and consultants have greater financial

and other resources, different risk profiles and a longer operating history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates and consultants than what we have to offer. If we are unable to attract, retain and motivate high-quality personnel and consultants to accomplish our business objectives, the rate and success at which we can discover and develop product candidates and our business will be limited and we may experience constraints on our development objectives.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock options that vest over time. The value to employees of stock options that vest over time may be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. For example, employment of our key employees is at-will, which means that any of our employees could leave our employment at any time, with or without notice. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

Our future performance will also depend, in part, on our ability to successfully integrate newly hired executive officers into our management team and our ability to develop an effective working relationship among senior management. Our failure to integrate these individuals and create effective working relationships among them and other members of management could result in inefficiencies in the development and commercialization of our product candidates, harming future marketing approvals, sales of our product candidates and our results of operations.

Our employees, independent contractors, principal investigators, CROs, consultants, vendors and collaboration partners may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, principal investigators, CROs, consultants, vendors and collaboration partners may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or unauthorized activities that violate: (i) FDA, the national competent authorities of individual EU Member States, or comparable foreign regulations, including those laws that require the reporting of true, complete and accurate information to the FDA, EMA, or other comparable foreign regulatory authorities; (ii) manufacturing standards; (iii) U.S. federal and state fraud and abuse and other healthcare laws and regulations, including foreign requirements; or (iv) laws that require the reporting of true and accurate financial information and data. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. These activities also include the improper use of information obtained in the course of clinical trials or falsification of clinical trial data, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third-parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other U.S. federal or non U.S. healthcare

programs, imprisonment, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Changes in U.S. and international trade policies, particularly with respect to China, may adversely impact our business and operating results.

The U.S. government has recently made statements and taken certain actions that may lead to potential changes to U.S. and international trade policies, including imposing several rounds of tariffs and export control and sanctions restrictions affecting certain products manufactured in China. Both China and the United States have each imposed tariffs indicating the potential for further trade barriers, including the U.S. Commerce Department adding numerous Chinese entities to its Unverified List, which requires U.S. exporters to go through more procedures before exporting goods to such entities. It is unknown whether and to what extent new tariffs, export controls, or other new laws or regulations will be adopted, or the effect that any such actions would have on us or our industry. Most recently, legislation pending in Congress called the BIOSECURE Act would, among other things, prohibit U.S. federal government contracts, grants, and loans in connection with biotechnology equipment or services provided or produced by certain named Chinese "biotechnology companies of concern," which include WuXi AppTec and WuXi Biologics, or collectively WuXi. See the risk factor titled "Risks Related to Government Regulatory and Legal Requirements—We rely on third-party manufacturers, CROs, CMOs, and suppliers to supply, develop and test components of our product candidates. The loss of our third-party manufacturers, CROs, CMOs, or suppliers, their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, or changes in methods of product candidate manufacturing, development or formulation would materially and adversely affect our business."

Any unfavorable government policies on international trade, such as export controls, economic, sanctions, capital controls or tariffs, may increase the cost of manufacturing our product candidates and platform materials, affect our ability to commercialize our product candidates if approved, the competitive position of our product candidates, and import or export of raw materials and finished product candidate used in our preclinical studies and clinical trials, particularly with respect to any product candidates and materials that we import from China, including pursuant to our service arrangements with WuXi. If any new tariffs, export controls, sanctions, legislation and/or regulations are implemented, or if existing trade agreements are renegotiated or, in particular, if either the U.S. or Chinese government takes retaliatory trade actions due to the recent trade tensions, such changes could have an adverse effect on our business, financial condition and results of operations.

Clinical trial and product liability lawsuits against us could divert our resources, could cause us to incur substantial liabilities and could limit commercialization of any product candidates we may develop.

We will face an inherent risk of clinical trial and product liability exposure related to the testing of any product candidates we may develop in clinical trials, and we will face an even greater risk if we commercially sell any products that we may develop. While we currently have not completed the evaluation of any product candidates in human clinical trials or that have been approved for commercial sale, the future use of product candidates by us in clinical trials, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies or others selling such products. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates that we may develop;
- withdrawal of clinical trial participants and inability to continue clinical trials;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;

- substantial monetary awards to trial participants or patients;
- significant time and costs to defend any related litigation;
- a diversion of our management's time and our resources;
- exhaustion of any available insurance and our capital resources;
- initiation of investigations by regulators;
- the inability to commercialize any product candidates that we may develop;
- injury to our reputation and significant negative media attention; and
- a decline in price of our common stock.

We will need to increase our insurance coverage if we continue to commence clinical trials or if we commence commercialization of any product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. If and when coverage is secured, our insurance policies may also have various exclusions and we may be subject to a product liability claim for which we have no coverage. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise. If a successful clinical trial or product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

If we or any contract manufacturers and suppliers we engage fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous foreign, federal, state and local environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources, including any available insurance. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities.

We could incur significant costs and liabilities which may adversely affect our financial condition and operating results for failure to comply with such laws and regulations, including, among other things, civil or criminal fines and penalties, property damage and personal injury claims, costs associated with upgrades to our facilities or changes to our operating procedures, or injunctions limiting or altering our operations.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research and product development efforts. In addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. In the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations, which are becoming increasingly more stringent, may impair our research, development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Our future ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Since our inception, we have incurred losses and we may never achieve profitability. As of December 31, 2023, we had $14.6 million of federal net operating loss (NOL) carryforwards and $28.9 million of state NOL carryforwards, available to reduce future taxable income. To the extent that we continue to generate taxable losses, under current law, our unused U.S. NOLs may be carried forward to offset a portion of future taxable income, if any. Additionally, we continue to generate business tax credits, including research and development tax credits, which generally may be carried forward to offset a portion of future taxable income, if any, subject to expiration of such credit carryforwards. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (Code), if a corporation undergoes an "ownership change," generally defined as one or more stockholders or groups of stockholders who own at least 5% of the corporation's equity increasing their equity ownership in the aggregate by more than 50 percentage points (by value) over a three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. Similar rules may apply under state tax laws. Our prior equity offerings and other changes in our stock ownership may have resulted in such ownership changes in the past. In addition, we may experience ownership changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which are outside of our control. As a result, if we earn net taxable income, our ability to use our pre-change NOLs or other pre-change tax attributes to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us and could require us to pay U.S. federal income taxes earlier than would be required if such limitations were not in effect. Additional limitations on our ability to utilize our NOLs to offset future taxable income may arise as a result of our corporate structure whereby NOLs generated by our subsidiary may not be available to offset taxable income earned by our subsidiary. There is a risk that due to changes under the tax law, regulatory changes or other unforeseen reasons, our existing NOLs or business tax credits could expire or otherwise be unavailable to offset future income tax liabilities. At the state level, there may also be periods during which the use of NOLs or business tax credits is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, under Senate Bill 167 enacted by California in June 2024, generally, there is a suspension of the NOL deduction for tax years beginning on or after January 1, 2024, and before January 1, 2027 for individual and corporate taxpayers with net business income or modified adjusted gross income of $1 million or more, and a limit of $5 million of business credits on the aggregate use of otherwise allowable business tax credits that any individual or corporate taxpayer could claim for tax years beginning on or after January 1, 2024, and before January 1, 2027. For these reasons, we may not be able to realize a tax benefit from the use of our NOLs or tax credits, even if we attain profitability.

We have and may in the future engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

We have and in the future, we may consider strategic transactions, such as acquisitions of companies, asset purchases, and in-licensing or out-licensing of products, product candidates or technologies from time to time. Additional potential transactions that we may consider include a variety of different business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any such transaction may require us to incur non-recurring or other charges, may increase our near- and long-term expenditures and may pose significant integration challenges or disrupt our senior management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including:

- up-front, milestone and royalty payments, equity investments and financial support of new research and development candidates including increase of personnel, all of which may be substantial;

- exposure to unknown liabilities, including potential indemnification claims from a potential spin-off or out-license of certain of our intellectual property rights;
- disruption of our business and diversion of our management's time and attention to develop acquired products, product candidates or technologies;
- incurrence of substantial debt or dilutive issuances of equity securities to pay for acquisitions;
- higher than expected costs in risk-sharing collaborations;
- higher-than-expected acquisition and integration costs;
- lower-than-expected benefits, from out-licensing or selling our technology, intellectual property or any of our subsidiaries or, from in-licensing intellectual property or purchasing assets;
- write-downs of assets or goodwill or impairment charges;
- difficulty and cost in combining or separating the operations and personnel of any acquired or sold businesses with our existing operations and personnel;
- we may disagree with our strategic partners about decisions affecting the business, which could result in litigation or arbitration that increases our expenses, distracts our officers and directors and disrupts the day-to-day operations of the strategic venture, including by delaying important decisions until the dispute is resolved;
- our strategic partners may take actions that we oppose;
- our strategic partners might experience financial distress or become bankrupt;
- impairment of relationships with key suppliers or customers of any acquired or sold businesses due to changes in our senior management and ownership; and
- inability to retain key employees of any acquired businesses.

In addition, to the extent we enter into a strategic transaction that includes ongoing operations or shared ownership and management, our strategic partners may take actions that we oppose or we may disagree with our strategic partners about decisions affecting the business, which could result in litigation or arbitration, distract our officers and directors and otherwise disrupt the day-to-day operations of our business and the business of the strategic partner or entity. Furthermore, to the extent that our directors and officers serve on the boards of our strategic partners, such directors may be required to abstain from board decision-making in the event of a conflict of interest.

Accordingly, although we cannot be certain that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks, and could harm our business, results of operations, financial condition and prospects.

We are conducting, and will continue to conduct, clinical trials for our current product candidates outside of the United States, and we may do so for our other product candidates. However, conducting trials outside of the United States exposes us to additional risks, which could materially harm our business.

We are conducting, and may in the future conduct, certain of our clinical trials at centers outside of the United States. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA or another comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. For example, in cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or

if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study is well-designed and well-conducted in accordance with GCP requirements and the FDA is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. If the FDA, the EMA, the U.K. Medicines and Healthcare products Regulatory Agency (MHRA), or other foreign regulatory authorities do not accept any data generated from other jurisdictions, we would likely be required to conduct additional clinical trials, which would be costly and time consuming, and delay aspects of our development plan, which could harm our business.

Conducting trials outside the United States also exposes us to additional risks, including risks associated with:

- additional foreign regulatory requirements;
- foreign exchange fluctuations;
- compliance with foreign manufacturing, customs, shipment and storage requirements;
- cultural differences in medical practice and clinical research;
- diminished protection of intellectual property in some countries; and
- interruptions or delays in our trials resulting from geopolitical events, such as war or terrorism.

If our information systems or data, or those of third parties with whom we work, are or were compromised, we could experience adverse consequences from such compromises, such as damage our reputation, significant financial and legal exposure, or other adverse effects to our business.

We rely on information technology systems that we or third parties with whom we work, operate to process, transmit and store electronic information, including sensitive information, in our day-to-day operations. For example, in connection with our product development efforts, we may collect and process a variety of personal data, proprietary information, trade secrets, and clinical trial information. As a result, we and the third parties with whom we work, face a variety of evolving threats that could cause security incidents.

Cyberattacks, malicious internet-based activity, online and offline fraud, and other similar activities could result in the theft or destruction of intellectual property, personal data, or other misappropriation of assets, or otherwise threaten to compromise our confidential or proprietary information and disrupt our operations. Such threats are increasing in their frequency, sophistication, and intensity, have become increasingly difficult to detect, and come from a variety of sources, including traditional computer “hackers,” threat actors, “hacktivists,” organized criminal threat actors, personnel (such as through theft or misuse), sophisticated nation states, and nation-state-supported actors. Some actors now engage and are expected to continue to engage in cyberattacks, including without limitation nation-state actors for geopolitical reasons and in conjunction with military conflicts and defense activities, wrongful conduct by hostile foreign governments and industrial espionage. During times of war and other major conflicts, we and the third parties upon which we work may be vulnerable to a heightened risk of these attacks, including retaliatory cyber-attacks, that could materially disrupt our systems and operations, supply chain, and ability to produce, sell and distribute our services.

We and the third parties with whom we work are subject to a variety of evolving threats, including but not limited to the deployment of harmful malware (including as a result of advanced persistent threat intrusions), ransomware, denial-of-service, credential stuffing, credential harvesting, social engineering fraud (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), malicious code (such as viruses and worms), personnel misconduct or error, ransomware attacks, supply-chain attacks,

software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, adware, attacks enhanced or facilitated by AI, telecommunications failures, earthquakes, fires, floods, and other similar threats.

In particular, severe ransomware attacks are becoming increasingly prevalent and can lead to significant interruptions in our operations, ability to provide our products or services, loss of sensitive data and income, reputational harm, and diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments.

A successful cyberattack could cause serious negative consequences for us, including, without limitation, the disruption of operations, the misappropriation of confidential business information, including financial information, trade secrets, financial loss and the disclosure of corporate strategic plans. Although we devote resources to protect our information systems, there can be no assurance that our efforts will prevent information cybersecurity incidents or breaches that would result in business, legal, financial or reputational harm to us, or would have a material adverse effect on our results of operations and financial condition.

Remote work has become more common and has increased risks to our information technology systems and data, as more of our employees utilize network connections, computers, and devices outside our premises or network, including working at home, while in transit and in public locations. Additionally, future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues or other constraints not found during due diligence of such acquired or integrated entities, creating additional challenges to integrate said information systems into our information technology environment and security program.

While we have implemented security measures designed to protect against security incidents, there can be no assurance that these measures will be effective. We take steps designed to detect, mitigate, and remediate known vulnerabilities in our information systems (such as our hardware and/or software, including that of third parties with whom we work). We may not, however, detect and remediate all such vulnerabilities on a timely basis for various reasons including but not limited to the impact on the functional operations of affected information systems or the availability of a solution for the impacted technology. While remedial measures and/or patches designed to address identified vulnerabilities are being developed and/or implemented, these vulnerabilities could be exploited and result in a security incident.

Applicable data privacy and security obligations may require us to notify relevant stakeholders, including affected individuals, customers, regulators, and investors, of security incidents. Such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences. Additionally, laws in all 50 states require businesses to provide notice to customers whose personal data has been disclosed as a result of a data breach. These laws are not consistent, and compliance in the event of a widespread data breach is difficult and may be costly. We also may be contractually required to notify patients or other counterparties of a cybersecurity incident or breach. Although we may have contractual protections with our service providers, any actual or perceived cybersecurity incident or breach could harm our reputation and brand, expose us to potential liability or require us to expend significant resources on data security and in responding to any such actual or perceived breach. Any contractual protections we may have from our service providers may not be sufficient to adequately protect us from any such liabilities and losses, and we may be unable to enforce any such contractual protections. In addition to government regulation, privacy advocates and industry groups have and may in the future propose self-regulatory standards from time to time. These and other industry standards may legally or contractually apply to us, or we may elect to comply with such standards. Determining whether personal data has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and may be subject to changing interpretation.

While we maintain insurance coverage, we cannot assure that such coverage will be adequate or otherwise protect us from or adequately mitigate liabilities or damages with respect to claims, costs, expenses, litigation, fines, penalties, business loss, data loss, regulatory actions or material adverse effects arising out of our data protection, privacy, and security practices, or that such coverage will continue to be available on acceptable terms or at all. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

Threat actors and their techniques change frequently, are often sophisticated in nature, and may not be detected until after a cybersecurity incident has occurred. Any failure to prevent or mitigate cybersecurity incidents, breaches or other improper access to, use of, or disclosure of our clinical data or patients' personal data could result in significant liability under state (e.g., state breach notification laws), federal (e.g., HIPAA), and foreign (e.g., the GDPR) laws, and may cause a material adverse impact to our reputation, affect our ability to conduct new studies and potentially disrupt our business.

In addition, our reliance on the computer systems of various third parties with whom we work, including our CROs and other contractors, introduce new cybersecurity risks and vulnerabilities, including supply-chain attacks, and other threats to our business operations. We rely on our third-party partners to implement effective security measures and identify and correct for any such failures, deficiencies or breaches. However, our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. While we may be entitled to damages if the third parties with whom we work fail to satisfy their privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award. In addition, supply-chain attacks have increased in frequency and severity, and we cannot guarantee that third parties' infrastructure in our supply chain or that of the third parties with whom we work have not been compromised.

If we or our third-party partners fail to maintain or protect our information technology systems and data integrity effectively or fail to anticipate, plan for or manage significant disruptions to our information technology systems, we or our third-party partners could have difficulty preventing, detecting and controlling such cyberattacks and any such attacks could result in disputes with physicians, patients and our partners, regulatory sanctions or penalties, increases in operating expenses, expenses or lost revenues or other adverse consequences, any of which could have a material adverse effect on our business, results of operations, financial condition, prospects and cash flows. Any failure by such third parties to prevent or mitigate cybersecurity incidents, breaches or other improper access to or disclosure of such information could have similarly adverse consequences for us.

In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive data about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position. Additionally, sensitive data of the Company could be leaked, disclosed, or revealed as a result of or in connection with our employees', personnel's, or vendors' use of generative artificial intelligence technologies.

Any of the previously identified or similar threats could cause a security incident or other interruption that could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to our sensitive data or our information technology systems, or those of the third parties with whom we work. A security incident or other interruption could disrupt our ability (and that of third parties with whom we work) to provide our services.

Risks Related to Government Regulatory and Legal Requirements

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA, EMA, and other comparable foreign regulatory authorities to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government shut down several times and certain regulatory agencies, such as the FDA, furloughed critical employees and ceased critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

If a prolonged government shutdown occurs, or if global health concerns prevent the FDA, EMA, or other comparable foreign regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA, EMA, or other comparable foreign regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

We may not be able to obtain orphan drug designation or exclusivity for our product candidates, and even if we do, that designation may not provide an expedited development or regulatory review or approval process and any orphan drug exclusivity we may receive for approved products may not prevent the FDA or the EMA from approving other competing products.

Under the Orphan Drug Act, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition. A similar regulatory scheme governs the designation of orphan product candidates by the EMA in the EU. Generally, if a product with an orphan drug designation subsequently receives the first regulatory approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA (as applicable) from approving another marketing authorization application for another similar product candidate for the same orphan therapeutic indication for that time period. The applicable period is seven years in the United States and ten years in the EU (which can be extended to 12 years if the sponsor complies with an agreed-upon pediatric investigation plan). The exclusivity period in the EU can be reduced to six years if at the end of the fifth year it is determined that a product no longer meets the criteria for orphan designation, including if the product is sufficiently profitable so that market exclusivity is no longer justified.

In order for the FDA to grant orphan drug exclusivity to one of our product candidates, the agency must find that the product candidate is indicated for the treatment of a condition or disease that affects fewer than 200,000 individuals in the United States or that affects 200,000 or more individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product candidate available for the disease or condition will be recovered from sales of the product in the United States. Hypoparathyroidism is a disease that affects approximately 70,000 individuals in the United States, and accordingly, SEP-786, our small molecule agonist to PTH1R, in development for hypoparathyroidism, may qualify for orphan drug designation. The FDA may conclude that the condition or disease for which we seek orphan drug exclusivity does not meet this standard. In the EU, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis,

prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the EU when the application is made, or (b) it is unlikely that the product, without the benefits derived from orphan status, would generate sufficient return in the EU to justify the necessary investment in its development; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU, or if such a method exists, the product will be of significant benefit to those affected by the condition. Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different product candidates can be approved for the same condition. In addition, even after an orphan drug is approved, the FDA or the EMA can subsequently approve the same product candidate for the same condition if the FDA or EMA (as applicable) concludes that the later product candidate is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care compared with the product that has orphan exclusivity. Orphan drug exclusivity may also be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of the patients with the rare disease or condition.

While we may in the future seek designations for our product candidates with the FDA, EMA and other comparable foreign regulatory authorities that are intended to confer benefits such as a faster development process, an accelerated regulatory pathway or regulatory exclusivity, there can be no assurance that we will successfully obtain such designations. In addition, even if one or more of our product candidates are granted such designations, we may not be able to realize the intended benefits of such designations.

The FDA, EMA, and other comparable foreign regulatory authorities offer certain designations for product candidates that are designed to encourage the research and development of product candidates that are intended to address conditions with significant unmet medical need. These designations may confer benefits such as additional interaction with regulatory authorities, a potentially accelerated regulatory pathway and priority review. However, there can be no assurance that we will successfully obtain such designations for our product candidates. In addition, while such designations could expedite the development or approval process, they generally do not change the standards for approval. Even if we obtain such designations for our product candidates, there can be no assurance that we will realize their intended benefits.

For example, we may seek a Fast Track Designation for our lead product candidate, SEP-786, and one or more of our product candidates. If a product is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product sponsor may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may rescind the Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development activities.

In the EU, we may seek to participate in the PRIority Medicines (PRIME) scheme for our potential product candidates. The PRIME scheme is intended to encourage development of product candidates in areas of unmet medical need and provides accelerated assessment of product candidates representing substantial innovation, where the marketing authorization application will be made through the centralized procedure in the EU. Eligible products must target conditions for which there is an unmet medical need (i.e. no treatment option exists in the European Union or, they can offer a major therapeutic advantage over existing treatments). Many benefits accrue to sponsors of product candidates with access to the PRIME scheme, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and accelerated marketing authorization application assessment once a dossier has been submitted. There is no guarantee, however, that our potential product candidate would be deemed eligible for the PRIME scheme and even if we do participate in the PRIME scheme, where during the course of development a product no longer meets the eligibility criteria, support under the PRIME scheme may be withdrawn. PRIME eligibility does not change the standards for product approval, and there is no assurance that any such designation or eligibility will result in expedited review or approval.

We may seek Breakthrough Therapy Designation for one or more of our product candidates. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval and priority review.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe a product candidate we develop meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of Breakthrough Therapy Designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if any product candidate we develop qualifies as a breakthrough therapy, the FDA may later decide that the drug no longer meets the conditions for qualification and rescind the designation.

Even in the absence of obtaining Fast Track and/or Breakthrough Therapy Designations, a sponsor can seek priority review at the time of submitting a marketing application. The FDA may designate a product for priority review if it is a product that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting adverse reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, or evidence of safety and effectiveness in a new subpopulation. A priority review designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months. Priority review designation may be rescinded if a product no longer meets the qualifying criteria.

Where appropriate, we may secure approval from the FDA, EMA, or other comparable foreign regulatory authorities through the use of expedited approval pathways, such as accelerated approval. If we are unable to obtain such approvals, we may be required to conduct additional preclinical studies or clinical trials beyond those that we contemplate, which could increase the expense of obtaining, and delay the receipt of, necessary marketing approvals. Even if we receive accelerated approval from the FDA, EMA, or other comparable foreign regulatory authorities, if our confirmatory trials do not verify clinical benefit, or if we do not comply with rigorous post-marketing requirements, the FDA, EMA, or other comparable foreign regulatory authorities may seek to withdraw the accelerated approval.

Where possible, we plan to pursue accelerated development strategies in areas of high unmet need. We may seek an accelerated approval pathway for our one or more of our product candidates from the FDA, EMA, or other comparable foreign regulatory authorities. Under the accelerated approval provisions in the Federal Food, Drug, and Cosmetic Act, and the FDA's implementing regulations, the FDA may grant accelerated approval to a product candidate designed to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies upon a determination that the product candidate has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. The accelerated approval pathway may be used in cases in which the advantage of a new drug over available therapy

may not be a direct therapeutic advantage but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. Under FDORA, the FDA is permitted to require, as appropriate, that a post-approval confirmatory study or studies be underway prior to approval or within a specified time period after the date of approval for a product granted accelerated approval. FDORA also gives the FDA increased authority to withdraw approval of a drug or biologic granted accelerated approval on an expedited basis if the sponsor fails to conduct such studies in a timely manner, send status updates on such studies to the FDA every 180 days to be publicly posted by the agency, or if such post-approval studies fail to verify the drug's predicted clinical benefit. The FDA is empowered to take action, such as issuing fines, against companies that fail to conduct with due diligence any post-approval confirmatory study or submit timely reports to the agency on their progress.

Prior to seeking accelerated approval, we would seek feedback from the FDA, EMA, or other comparable foreign regulatory authorities and would otherwise evaluate our ability to seek and receive such accelerated approval. There can be no assurance that after our evaluation of the feedback and other factors we will decide to pursue or submit an NDA or BLA for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that after subsequent feedback from the FDA, EMA, or other comparable foreign regulatory authorities, we will continue to pursue or apply for accelerated approval or any other form of expedited development, review or approval, even if we initially decide to do so. Furthermore, if we decide to submit an application for accelerated approval, there can be no assurance that such application will be accepted or that any approval will be granted on a timely basis, or at all. The FDA, EMA, or other comparable foreign regulatory authorities could also require us to conduct further studies prior to considering our application or granting approval of any type, including, for example, if other products are approved via the accelerated pathway and subsequently converted by FDA to full approval. A failure to obtain accelerated approval or any other form of expedited development, review or approval for our product candidate would result in a longer time period to commercialization of such product candidate, could increase the cost of development of such product candidate and could harm our competitive position in the marketplace.

We are subject to stringent and evolving U.S. and foreign laws, rules, regulations, policies, industry standards, contractual requirements, and other obligations related to data protection, privacy, and security. Our actual or perceived failure to comply with such obligations could adversely affect our business.

We are subject to various data protection, privacy, and security laws, rules, regulations, policies, industry standards, contractual requirements, and other obligations that apply to our collection, transmission, storage, use, disclosure, transfer, maintenance and other processing of sensitive information, including personal data. The legislative and regulatory landscape for data protection, privacy, and security continues to evolve across jurisdictions worldwide. For example, in the United States, federal, state, and local governments have enacted numerous data protection, privacy, and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), and other similar laws (e.g., wiretapping laws).

In particular, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH), and implementing regulations, establish stringent privacy and security standards that limit the use and disclosure of individually identifiable health information, or protected health information, and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information.

Data protection, privacy, and security obligations remain an evolving landscape at both the domestic and foreign level, with new laws, rules and regulations coming into effect, posing continued legal and compliance challenges. For example, in the past few years, numerous U.S. states—including California, Virginia, Colorado,

Connecticut, and Utah—have enacted comprehensive privacy laws that impose certain obligations on covered businesses, including providing specific disclosures in privacy notices and affording residents with certain rights concerning their personal data. As applicable, such rights may include the right to access, correct, or delete certain personal data, and to opt-out of certain data processing activities, such as targeted advertising, profiling, and automated decision-making. The exercise of these rights may impact our business and ability to conduct our operations. Certain states also impose stricter requirements for processing certain personal data, including sensitive information, such as conducting data privacy impact assessments. These state laws allow for statutory fines for noncompliance. For example, in California, the California Consumer Privacy Act of 2018, as amended by the California Privacy Rights Act of 2020 (CPRA) (collectively, CCPA), provides for fines of up to $7,500 per intentional violation and allows privacy litigants affected by certain data breaches to recover significant statutory damages. The CCPA and other comprehensive U.S. state privacy laws exempt some data processed in the context of clinical trials, but these developments may further complicate compliance efforts, and increase legal risk and compliance costs for us, the third parties with whom we work.

Similar laws are being proposed in numerous other states and at the federal level. Proposed legislation, if enacted, may add additional complexity, variation in requirements, processing restrictions, potential legal risk, require additional investment of resources, impact business strategies, and could result in increased compliance costs and/or changes in business practices and policies.

There are also states that specifically regulate consumer health information. For example, Washington has enacted a consumer health privacy law, the My Health My Data Act (MHMD), that regulates the collection and sharing of consumer health information. MHMD places restrictions on processing consumer health data (including imposing stringent requirements for consents), provides consumers certain rights with respect to their health data, and creates a private right of action to allow individuals to sue for violations of the law, which further increases the relevant compliance risk. Connecticut and Nevada have also passed similar laws regulating consumer health data.

Outside the United States, an increasing number of laws, regulations, and industry standards govern data protection, privacy, and security. For example, if we conduct clinical trials in the European Economic Area (EEA) and/or the United Kingdom (U.K.), we may become subject to additional privacy laws in those jurisdictions, such as the EU General Data Protection Regulation (EU GDPR) and the EU GDPR as incorporated into U.K. domestic law post-Brexit (U.K. GDPR and, together with the EU GDPR, GDPR), both of which impose strict requirements for processing personal data.

For example, under the GDPR, data protection authorities may impose large penalties for violations of the GDPR, including potential fines of up to €20 million (£17.5 million GBP) or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Non-compliance could also result in the imposition of orders to stop data processing activities, which could have a material adverse effect on our business, financial position, and results of operations.

In addition, we may be unable to transfer personal data from the EEA, U.K., and other jurisdictions to the U.S. or other countries due to data localization requirements or limitations on cross-border data flows. Although there are various mechanisms that may be used in some cases to lawfully transfer personal data to the U.S. or other countries, these mechanisms are subject to legal challenges and may not always be available to us. For example, the GDPR requires certain adequate safeguards to enable the transfer of personal data outside of the EEA or the U.K., in particular to the U.S., such as the EU standard contractual clauses, U.K. International Data Transfer Addendum/Agreement, and the EU-U.S. Data Privacy Framework (Framework) and the UK extension thereto (which allows for transfers to relevant U.S.-based organizations who self-certify compliance and participate in the Framework). However, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the U.S. If there is no

lawful manner for us to transfer personal data from the EEA, the U.K. or other jurisdictions to the U.S., or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions (such as Europe) at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business.

Furthermore, if we fail, or are perceived to have failed, to comply with applicable data protection, privacy, and security laws, including applicable HIPAA privacy and security standards, we could face significant administrative, civil and criminal penalties. For example, HHS has the discretion to impose significant penalties, and such enforcement activity can result in financial liability and reputational harm, and responses to such enforcement activity can consume significant internal resources. In addition, state attorneys general are authorized to bring civil actions seeking either injunctions or damages in response to violations that threaten the data protection, privacy, or security of the personal data of state residents. We cannot be sure how these laws, rules and regulations will be interpreted, enforced, or applied to our operations. In addition to the risks associated with enforcement activities and potential contractual liabilities, our ongoing efforts to comply with evolving laws, rules and regulations at the international, federal and state level may be costly and require ongoing modifications to our policies, procedures and systems.

Additionally, we rely on certain third-party vendors to process certain confidential, sensitive, or personal data on our behalf. Failure by us or our third-party vendors to comply with any of these laws, rules, regulations, contractual requirements, industry standards, or other obligations could result in notification obligations, enforcement actions, regulatory investigations or inquiries, significant fines, imprisonment of company officials and public censure, litigation and claims for damages by affected individuals, customers or business partners, damage to our reputation and loss of goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations or prospects.

Our employees and personnel use generative artificial intelligence technologies to perform their work, and the disclosure and use of personal data in generative artificial intelligence technologies is subject to various privacy laws and other privacy obligations. Governments have passed and are likely to pass additional laws regulating generative artificial intelligence. Our use of this technology could result in additional compliance costs, regulatory investigations and actions, and lawsuits. If we are unable to use generative artificial intelligence, it could make our business less efficient and result in competitive disadvantages.

We also make public statements about our use, collection, disclosure, and other processing of personal data through our privacy policies and information provided on our website. Although we endeavor to comply with our public statements and documentation, we may at times fail to do so or be alleged to have failed to do so. The publication of our privacy policies and other statements that provide promises and assurances about data protection, privacy, and security can subject us to potential government or legal action if they are found to be deceptive, unfair or misrepresentative of our actual practices.

In addition to data protection, privacy, and security laws, we are contractually subject to industry standards adopted by industry groups and may become subject to such obligations in the future. We are also bound by other contractual obligations related to data protection, privacy, and security, and our efforts to comply with such obligations may not be successful.

Obligations related to data protection, privacy, and security (and consumers' data privacy expectations) are quickly changing, becoming increasingly stringent, and creating uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources and may necessitate changes to our services, information technologies, systems, and practices and to those of any third parties that process personal data on our behalf.

All of these compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants and legal advisors, which are likely to increase over time. Our efforts to comply with the evolving data protection, privacy, and security laws, rules, regulations, and other obligations may be unsuccessful. It is possible that these various obligations may be interpreted and applied in a manner that is inconsistent with our practices and our efforts to comply with the evolving data protection, privacy, and security obligations may be unsuccessful. We may need to devote significant resources to understanding and complying with this changing landscape. In addition, such requirements may require us to modify our data processing practices and policies, utilize management's time and/or divert resources from other initiatives and projects. Any actual or perceived failure by us or our third-party partners to comply with such laws, rules, regulations, and other obligations regarding data protection, privacy, and security could result in significant government-imposed fines or orders requiring that we change our practices, claims for damages or other liabilities, regulatory investigations and enforcement action, litigation and significant costs for remediation, any of which could adversely affect our business. Even if we are not determined to have violated these laws, rules or regulations, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity. Further, any of the foregoing could have a material adverse effect on our business, financial condition, results of operations or prospects.

Healthcare legislative reform measures may have a negative impact on our business and results of operations.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval. For more information, see the section titled "Business–Government Regulation–Current and Future U.S. Healthcare Reform."

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the ACA) was passed, which substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare may adversely affect:

- the demand for any of our product candidates, if approved;
- the ability to set a price that we believe is fair for any of our product candidates, if approved;
- our ability to generate revenues and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical and biologic products. In addition, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs.

In August 2022, the Inflation Reduction Act of 2022 (IRA) was signed into law. The IRA includes several provisions that may impact our business, depending on how various aspects of the IRA are implemented. Provisions that may impact our business include a $2,000 out-of-pocket cap for Medicare Part D beneficiaries, the imposition of new manufacturer financial liability on most drugs in Medicare Part D, permitting the U.S. government to negotiate Medicare Part B and Part D pricing for certain high-cost drugs and biologics without generic or biosimilar competition, requiring companies to pay rebates to Medicare for drug prices that increase faster than inflation, and delay until January 1, 2032 the implementation of the HHS rebate rule that would have limited the fees that pharmacy benefit managers can charge. Further, under the IRA, orphan drugs are exempted from the Medicare drug price negotiation program, but only if they have one orphan designation and for which the only approved indication is for that disease or condition. If a product receives multiple orphan designations or has multiple approved indications, it may not qualify for the orphan drug exemption. The implementation of the IRA is currently subject to ongoing litigation challenging the constitutionality of the IRA's Medicare drug price negotiation program. The effects of the IRA on our business and the healthcare industry in general is not yet known.

We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

We cannot predict what healthcare reform initiatives may be adopted in the future. We expect that these and other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and additional downward pressure on the price that we receive for any approved drug. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our drugs.

Our relationships with customers, physicians, and third-party payors may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, other healthcare laws and regulations and health data privacy and security laws and regulations, contractual obligations and self-regulatory schemes. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Healthcare providers and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors may subject us to various federal and state fraud and abuse laws and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute, the federal civil and criminal false claims laws and the law commonly referred to as the Physician Payments Sunshine Act and regulations. These laws will impact, among other things, our clinical research, as well as our proposed sales and marketing programs. In addition, we may be subject to health information privacy and security laws by the federal government, the states and other jurisdictions in which we may conduct our business. For more information, see the section titled "Business–Government Regulation–Other Healthcare Laws."

Because of the breadth of these laws and the limited statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's

attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the curtailment or restructuring of our operations.

Legislation or other changes in U.S. tax law may have a material adverse effect on our business, cash flow, financial condition, or results of operations.

The rules dealing with U.S. federal, state, and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many changes have been made to applicable tax laws and changes are likely to continue to occur in the future. For example, under Section 174 of the Code, in taxable years beginning after December 31, 2021, expenses that are incurred for research and development in the United States will be capitalized and amortized, which may have an adverse effect on our cash flow. Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations.

It cannot be predicted whether, when, in what form, or with what effective dates, new tax laws may be enacted, or regulations and rulings may be enacted, promulgated or issued under existing or new tax laws, which could result in an increase in our or our stockholders' tax liability or require changes in the manner in which we operate in order to minimize or mitigate any adverse effects of changes in tax law or in the interpretation thereof. We urge investors to consult with their legal and tax advisers regarding the implications of potential changes in tax laws on an investment in our common stock.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could hinder our ability to compete in certain markets. We can face criminal liability and other serious consequences for violations, which can harm our business.

Our operations are subject to U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions and other trade laws and regulations. Anti-corruption laws generally prohibit us and our employees, officers, CROs, consultants, contractors and other partners and agents from authorizing, promising, offering, providing, soliciting, or receiving, directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We also expect our non-U.S. activities to increase over time. We expect to rely on third parties for research, preclinical studies and clinical trials and/or to obtain necessary permits, licenses, patent registrations and other marketing approvals. We can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

We are also subject to U.S. and foreign export controls, trade sanctions, and import laws and regulations. Such laws may prevent or prohibit the export or provision of certain products and services to countries, governments, and persons targeted by sanctions. Violations of these above laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, breach of contract and fraud litigation, reputational harm and other consequences.

Risks Related to Third Party Relationships

We may depend on collaborations with third parties for the discovery, development and commercialization of our product candidates. If any of these collaborations are not successful, we may not be able to capitalize on the market potential of those product candidates.

We may in the future seek third-party collaborators for research, development and commercialization of our product candidates. Pharmaceutical companies are our prior and likely future collaborators for any marketing, distribution, development, licensing or broader collaboration arrangements. If we fail to enter into future collaborations on commercially reasonable terms, or at all, or such collaborations are not successful, we may not be able to execute our strategy to develop certain targets, product candidates or disease areas that we believe could benefit from the resources of either larger pharmaceutical companies or those specialized in a particular area of relevance.

With respect to any future collaboration agreements, we expect to have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our current or future product candidates. Moreover, our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our current or future product candidates may pose the following risks to us:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on preclinical studies or clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our current or future product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- collaborators with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to litigation or potential liability;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our current or future product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

As a result of the foregoing, any future collaboration agreements may not lead to development or commercialization of our product candidates in the most efficient manner or at all. If a future collaborator of ours

were to be involved in a business combination, the continued pursuit and emphasis on our current or future product development or commercialization program could be delayed, diminished or terminated. Any failure to successfully develop or commercialize our product candidates pursuant to any future collaboration agreements could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Moreover, to the extent that any of our future collaborators were to terminate a collaboration agreement, we may be forced to independently develop these product candidates, including funding preclinical studies or clinical trials, assuming marketing and distribution costs and defending intellectual property rights, or, in certain instances, abandon product candidates altogether, any of which could result in a change to our business plan and have a material adverse effect on our business, financial condition, results of operations and prospects.

We rely on third-party manufacturers, CROs, CMOs, and suppliers to supply, develop and test components of our product candidates. The loss of our third-party manufacturers, CROs, CMOs, or suppliers, their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, or changes in methods of product candidate manufacturing, development or formulation would materially and adversely affect our business.

We do not own or operate facilities for drug manufacturing, storage, distribution or quality testing. We currently rely, and may continue to rely, on third-party contract manufacturers, including in China, to manufacture and test bulk drug substances, drug products, raw materials, samples, components, or other materials and reports. Reliance on third-party manufacturers may expose us to different risks than if we were to manufacture product candidates ourselves. There can be no assurance that our preclinical and clinical development product supplies will not be limited, interrupted, terminated or of satisfactory quality or continue to be available at acceptable prices. In addition, any replacement of our manufacturer could require significant effort and expertise because there may be a limited number of qualified replacements.

The manufacturing process for a product candidate is subject to FDA, EMA and foreign regulatory authority review. In some cases, we, and our suppliers and manufacturers, some of which may be our sole source of supply, must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as cGMPs. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA, EMA, and other comparable foreign regulatory authorities. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA, and other comparable foreign regulatory authorities, we may not be able to rely on their manufacturing facilities for the manufacture of elements of our product candidates. Moreover, we do not control the manufacturing process at our contract manufacturers and are completely dependent on them for compliance with current regulatory requirements. In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to enter into an agreement with another third party, which we may not be able to do on reasonable terms, if at all. In some cases, the technical skills or technology required to manufacture our product candidates may be unique or proprietary to the original manufacturer and we may have difficulty transferring such to another third party.

These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to enable us, or to have another third party, manufacture our product candidates. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines; and we may be required to repeat some of the development program. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

We expect to continue to rely on third-party manufacturers if we receive regulatory approval for any product candidate. To the extent that we have existing, or enter into future, manufacturing arrangements with third parties, we will depend on these third parties to perform their obligations in a timely manner consistent with contractual and regulatory requirements, including those related to quality control and assurance. Any manufacturing facilities used to produce our products will be subject to periodic review and inspection by the FDA and foreign regulatory authorities, including for continued compliance with cGMP requirements, quality control, quality assurance and corresponding maintenance of records and documents. If we are unable to obtain or maintain third-party manufacturing for product candidates, or to do so on commercially reasonable terms, we may not be able to develop and commercialize our product candidates successfully. Our or a third party's failure to execute on our manufacturing requirements, comply with cGMPs or maintain a compliance status acceptable to the FDA or foreign regulatory authorities could adversely affect our business in a number of ways, including:

- delay in the progress on certain research programs;
- an inability to initiate or continue clinical trials of product candidates under development;
- delay in submitting regulatory applications, or receiving regulatory approvals, for product candidates;
- loss of the cooperation of existing or future collaborators;
- subjecting third-party manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease distribution or to recall batches of our product candidates; and
- in the event of approval to market and commercialize a product candidate, an inability to meet commercial demands for our therapeutics.

Additionally, our contract manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our contract manufacturers were to encounter any of these difficulties, our ability to provide our product candidates to patients in preclinical and clinical trials, or to provide product for treatment of patients once approved, would be jeopardized.

In addition, we currently rely on foreign CROs and CMOs, including WuXi AppTec (HongKong) Limited, for manufacturing and development activities and will likely continue to rely on foreign CROs and CMOs in the future. Foreign CMOs may be subject to U.S. legislation, sanctions, trade restrictions and other foreign regulatory requirements which could increase the cost or reduce the supply of material available to us, delay the procurement or supply of such material or have an adverse effect on our ability to secure significant commitments from governments to purchase our potential therapies.

For example, if enacted, legislation pending in Congress known as the BIOSECURE Act would prohibit U.S. federal agencies from entering into or renewing a contract with any company that uses biotechnology equipment or services produced or provided by a "biotechnology company of concern" in the performance of that contract. It would also prohibit loans or grant funding from U.S. federal agencies to entities that use any biotechnology equipment or services produced or provided by a "biotechnology company of concern" in the performance of the government grant or loan. The effects of this legislation, if enacted, is unknown; however, it could have the downstream effect of restricting the ability of pharmaceutical companies that enter into contracts with or receive funding from U.S. federal agencies from purchasing services or equipment from certain Chinese biotechnology companies, including those that are specifically named in the proposed BIOSECURE Act, as well as supply chain disruptions or delays. The current version of the BIOSECURE Act introduced in the House of Representatives names WuXi Biologics and WuXi AppTec as "biotechnology companies of concern" and includes a grandfathering provision allowing biotechnology equipment and services provided or produced by named "biotechnology companies of concern" under a contract or agreement entered into before the effective date until January 1, 2032. Depending on whether the BIOSECURE Act becomes law, what the final language of the BIOSECURE Act includes, and how the law is interpreted by U.S. federal agencies, we could be potentially restricted from pursuing U.S. federal government business or government reimbursement for our products in the

future if we continue to use WuXi Biologics, WuXi AppTec or other suppliers or partners identified as "biotechnology companies of concern" beyond this grandfathering period. In addition to the BIOSECURE Act, any additional executive action, legislative action, or potential sanctions with China could materially impact our work with WuXi STA. U.S. executive agencies have the ability to designate entities and individuals on various governmental prohibited and restricted parties lists. Depending on the designation, potential consequences can range from a comprehensive prohibition on all transactions or dealings with designated parties, or a limited prohibition on certain types of activities, such as exports and financing activities, with designated parties.

For example, the pharmaceutical industry in China is strictly regulated by the Chinese government. Changes to Chinese regulations or government policies affecting pharmaceutical companies are unpredictable and may have a material adverse effect on our collaborators in China which could have an adverse effect on our business, financial condition, results of operations and prospects. Evolving changes in China's public health, economic, political, and social conditions and the uncertainty around China's relationship with other governments, such as the U.S. and the United Kingdom, or U.K., could also negatively impact our ability to manufacture our product candidates for our planned clinical trials or have an adverse effect on our ability to secure government funding, which could adversely affect our financial condition and cause us to delay our clinical development programs. Any of the foregoing factors could have a material adverse effect on our business, results of operations, or financial condition.

Furthermore, as product candidates progress through preclinical and clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the results of current or future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and jeopardize our ability to commercialize our product candidates, if approved, and generate revenue.

We may in the future enter into collaboration agreements and strategic alliances to maximize the potential of our structure-based drug discovery platform and product candidates, and we may not realize the anticipated benefits of such collaborations or alliances. We expect to form collaborations in the future with respect to our product candidates, but may be unable to do so or to realize the potential benefits of such transactions, which may cause us to alter or delay our development and commercialization plans.

Part of our business strategy is to explore additional collaborations with third parties to further utilize our platform capabilities on additional novel GPCR targets and to leverage partners additional disease biology understanding, development and commercial expertise, regional insights or other complementary capabilities to existing or future Septerna programs. We may therefore form or seek further strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our structure-based drug discovery platform or our current or future product candidates that we may develop. These transactions can entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. As a result, if we enter into acquisition or license agreements or strategic partnerships, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and

company culture. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or other anticipated benefits that led us to enter into the arrangement.

Research and development collaborations are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration, and may not commit sufficient efforts and resources, or may misapply those efforts and resources causing delays or termination of the research;
- collaborators may not pursue development and commercialization of our structure-based drug discovery platform or collaboration product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results or changes in their strategic focus;
- collaborators may delay, provide insufficient resources to, or modify or stop clinical trials for collaboration product candidates;
- collaborators could develop or acquire products outside of the collaboration that compete directly or indirectly with our products or product candidates;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital and personnel to pursue further development or commercialization of our structure-based drug discovery platform or the applicable product candidates; and
- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property.

In addition, we could face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming, expensive, and complex. We may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our structure-based drug discovery platform or product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate their desired safety and efficacy profile. If and when we collaborate with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of our technologies, product candidates and market opportunities. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under any license agreements from entering into additional agreements on certain terms or at all with other potential collaborators.

As a result of these risks, we may not be able to realize the benefit of any future collaborations or licensing agreements we may enter into. In addition, we may face regulatory obstacles in completing such transactions. If we are unable to do so, we may have to curtail the development of such product candidate, reduce or delay one or

more of our other development programs, delay the potential commercialization or reduce the scope of any planned sales or marketing activities for such product candidate, or increase our expenditures and undertake development, manufacturing or commercialization activities at our own expense. If we elect to increase our expenditures to fund development, manufacturing or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our structure-based drug discovery platform or product candidates or bring them to market and generate revenue.

Additionally, we may sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. If collaborations occur, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of such program and our business and financial condition could suffer.

Our products require specific constituents to work effectively and efficiently, and rights to those constituents are, and in the future may be, held by others. We may also seek to in-license third-party technologies to enhance our Native Complex Platform™. We may be unable to in-license any rights from constituents, methods of use, processes or other third-party intellectual property rights from third parties that we identify. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, which could harm our business. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology in order to establish or maintain our competitive position in the market. Any delays in entering into new collaborations or strategic partnership agreements related to our product candidates or our structure-based drug discovery platform could delay the development and commercialization of our product candidates in certain geographies or limit our ability to discover and develop new product candidates, which could harm our business prospects, financial condition, and results of operations.

The manufacturing of our product candidates is complex, and our third-party manufacturers may encounter difficulties in production. If we or any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials, our ability to obtain marketing approval, or our ability to provide supply of our products for patients, if approved, could be delayed or stopped.

The process of manufacturing pharmaceuticals is complex, time-consuming, highly regulated and subject to multiple risks. Our contract manufacturers must comply with legal requirements, cGMPs and guidelines for the manufacturing of pharmaceuticals used in clinical trials and, if approved, marketed products. Our contract manufacturers may have limited experience in the manufacturing of cGMP batches.

Manufacturing pharmaceuticals is highly susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, inconsistency in yields, variability in product characteristics and difficulties in scaling the production process. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered at our third-party manufacturers' facilities, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with cGMPs, lot consistency and timely availability of raw materials. Even if we or

our future collaborators obtain regulatory approval for any of our product candidates, there is no assurance that manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product or to meet potential future demand. If manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and prospects.

Scaling up a pharmaceutical manufacturing process is a difficult and uncertain task, and our third-party manufacturers may not have the necessary capabilities to complete the implementation, manufacturing and development process. If we are unable to adequately validate or scale-up the manufacturing process at our current manufacturers' facilities, we will need to transfer to another manufacturer and complete the manufacturing validation process, which can be lengthy. If we are able to adequately validate and scale-up the manufacturing process for our product candidates with a contract manufacturer, we will still need to negotiate with such contract manufacturer an agreement for commercial supply and it is not certain we will be able to come to agreement on terms acceptable to us.

We cannot assure that any stability or other issues relating to the manufacture of any of our current or future product candidates will not occur in the future. If our third-party manufacturers were to encounter any of these difficulties, our ability to provide any product candidates to patients in planned clinical trials and products to patients, once approved, would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our product candidates or products. We may also have to take inventory write-offs and incur other charges and expenses for product candidates or products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could adversely affect our business and delay or impede the development and commercialization of any of our product candidates or products, if approved, and could have an adverse effect on our business, prospects, financial condition and results of operations.

As part of our process development efforts, we also may make changes to the manufacturing processes at various points during development, for various reasons, such as controlling costs, achieving scale, decreasing processing time, increasing manufacturing success rate or other reasons. Such changes carry the risk that they will not achieve their intended objectives, and any of these changes could cause our current or future product candidates to perform differently and affect the results of our current or future clinical trials. In some circumstances, changes in the manufacturing process may require us to perform *ex vivo* comparability studies and to collect additional data from patients prior to undertaking more advanced clinical trials. For instance, changes in our process during the course of clinical development may require us to show the comparability of the product used in earlier clinical phases or at earlier portions of a trial to the product used in later clinical phases or later portions of the trial.

We intend to rely on third parties to conduct, supervise and monitor our preclinical studies and clinical trials, and if those third parties perform in an unsatisfactory manner, it may harm our business.

We do not currently have the ability to independently conduct preclinical studies or clinical trials required to develop our product candidates. We intend to rely on CROs, clinical trial sites and other third parties to ensure the proper and timely conduct of our preclinical studies and clinical trials, and we expect to have limited influence over their actual performance. We intend to rely upon CROs and others for the execution of future nonclinical studies and to monitor, manage and report data for our clinical trials. We expect to control only certain aspects of our CROs' and others' activities. Nevertheless, we will be responsible for ensuring that each of

our preclinical studies or clinical trials are conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs and others does not relieve us of our regulatory responsibilities.

We, our CROs and other third parties we might engage will be required to comply with good laboratory practices (GLPs) and GCPs, which are regulations and guidelines enforced by the FDA, EMA, and other comparable foreign regulatory authorities in the form of International Conference on Harmonization guidelines for any of our product candidates that are in preclinical and clinical development. The regulatory authorities enforce GCPs through periodic inspections of trial sponsors, principal investigators and clinical trial sites. Although we will rely on CROs and others to conduct GCP-compliant clinical trials, we remain responsible for ensuring that each of our GLP preclinical studies and clinical trials is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs and others does not relieve us of our regulatory responsibilities. If we, our CROs and other third parties we engage fail to comply with GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA, or other comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. Accordingly, if our CROs or others fail to comply with these regulations or fail to recruit a sufficient number of participants, we may be required to repeat clinical trials, which would delay the regulatory approval process.

While we will have agreements governing their activities, our CROs and other third parties we engage will not be our employees, and we will not control whether or not they devote sufficient time and resources to our future nonclinical and clinical programs. These CROs and others may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials, or other drug development activities which could harm our business. We face the risk of potential unauthorized disclosure or misappropriation of our intellectual property by CROs and others, which may reduce our trade secret protection and allow our potential competitors to access and exploit our proprietary technology. In addition, certain of our agreements with CROs and other third parties currently or will provide for monetary and other limitations on their liability. If our CROs do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if the quality or accuracy of the preclinical or clinical data they obtain is compromised due to the failure to adhere to our protocols or regulatory requirements or for any other reasons, our preclinical or clinical programs may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize any product candidate that we develop. As a result, our financial results and the commercial prospects for any product candidate that we develop would be harmed, our costs could increase, and our ability to generate revenue could be delayed, decreased or eliminated.

If our relationship with these CROs terminates, we may not be able to enter into arrangements with alternative CROs or do so on commercially reasonable terms. Switching or adding additional CROs involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can negatively impact our ability to meet our desired development timelines. Though we intend to carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a negative impact on our business, financial condition and prospects.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA. The FDA may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the trial. The FDA may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA and may ultimately lead to the denial of marketing approval of our current and future product candidates.

We currently depend and in the future may continue to depend on single- or limited-source suppliers for some of the components and materials used in the product candidates we may develop.

We currently depend and in the future may continue to depend on single- or limited-source suppliers for some of the components and materials used in any product candidates we may develop. We cannot ensure that these suppliers or service providers will remain in business, have sufficient capacity or supply to meet our needs or that they will not be purchased by one of our competitors or another company that is not interested in continuing to work with us. Our use of single-source suppliers of raw materials, components, key processes and finished goods could expose us to several risks, including disruptions in supply, price increases or late deliveries. There are, in general, relatively few alternative sources of supply for substitute components. These vendors may be unable or unwilling to meet our future demands for our clinical trials or commercial sale. Establishing additional or replacement suppliers for these components, materials and processes could take a substantial amount of time and it may be difficult to establish replacement suppliers who meet regulatory requirements. Any disruption in supply from any single-source supplier or service provider could lead to supply delays or interruptions which would damage our business, financial condition, results of operations and prospects.

If we have to switch to a replacement supplier, the manufacture and delivery of any product candidates we may develop could be interrupted for an extended period, which could adversely affect our business. Establishing additional or replacement suppliers, if required, may not be accomplished quickly or at all. If we are able to find a replacement supplier, the replacement supplier would need to be qualified and may require additional regulatory authority approval, which could result in further delay. While we seek to maintain adequate inventory of the single source components and materials used in our therapeutics, any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand for our product candidates.

Risks Related to Intellectual Property

If we are unable to obtain, maintain, defend and enforce patent or other intellectual property protection for our current or any future product candidates, or if the scope of the patent protection obtained is not sufficiently broad, we may not be able to compete effectively in our markets.

We anticipate that we will file additional patent applications both in the United States and in other jurisdictions, as appropriate. However, we cannot predict:

- if and when any patents will issue;
- the degree and scope of protection any issued patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether others will apply for or obtain patents claiming aspects similar to those covered by our patents and patent applications;
- whether we will need to initiate litigation or administrative proceedings to defend our patent rights, which may be costly whether we win or lose; or
- whether the patent applications that we own, or may in-license, will result in issued patents with claims that cover our current or future product candidates or uses thereof in the United States or in foreign jurisdictions.

We rely, and may in the future rely, upon a combination of patent, trade secret and trademark protection for our current and any future product candidates and proprietary technologies to prevent third parties from exploiting our achievements, thus eroding our competitive position in our market. These legal measures afford only limited protection, and competitors or others may gain access to or use our intellectual property and proprietary information. Our success depends in large part on our ability to obtain, maintain, expand, enforce,

and defend the scope, ownership or control, validity and enforceability of our intellectual property protection in the United States and other countries with respect to our current and any future product candidates and other proprietary technologies we may develop. Our commercial success depends in large part on our ability to obtain and maintain patent protection in the United States and other jurisdictions with respect to our current and any future product candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our current and future development programs and product candidates. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner, including as a result of factors impacting our, our licensors' or governmental patent offices' operations.

It is possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our current or any future product candidates in the United States or in foreign jurisdictions. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been or will be found, which unknown prior art can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do issue and even if such patents cover our current or any future product candidates, third parties may challenge their scope, validity, or enforceability, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any current or future product candidates that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

If the patent applications we hold or have in-licensed with respect to our product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for current or any future product candidates, it could dissuade companies from collaborating with us to develop product candidates, and threaten our ability to commercialize, future drug products. Any such outcome could have a negative effect on our business.

Composition of matter patents for pharmaceutical products provide intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain, however, that the claims in our pending patent applications covering the composition of matter of any of our current or future product candidates will be considered patentable by the U.S. Patent and Trademark Office (USPTO), or by patent offices in foreign jurisdictions, or that the claims in any of our patents that may issue will be considered valid and enforceable by courts in the United States or foreign jurisdictions. Method of use patents protect the use of a product for the specified method. We cannot be certain, however, that the claims in our pending patent applications covering methods of use of our current or future product candidates will be considered patentable by the USPTO, or by patent offices in foreign jurisdictions, or that the claims in any of our patents that may issue will be considered valid and enforceable by courts in the United States or foreign jurisdictions. Further, this type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, once approved for therapeutic use by FDA. or counterpart foreign regulatory authorities, physicians may prescribe these products "off-label" for those uses that are covered by our method of use patents. Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or enforce against.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign jurisdictions may not protect our rights to the same extent as the laws of the United States. Patent applications in the United States and certain other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to file for patent protection. As a result, the issuance, scope, validity, enforceability and commercial value of our patent

rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies or products.

Changes in either the patent laws or interpretation of the patent laws in the United States and other jurisdictions may diminish the value of our patents or narrow the scope of our patent protection. These changes could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a negative effect on our business.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or another patent office or become involved in opposition, derivation, reexamination, *inter partes* review (IPR), post-grant review (PGR) or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or drugs and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights or obtaining a costly license from a third party. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize our current or future product candidates.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. An adverse determination in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology, products or methods, or limit the duration of the patent protection of our technology, products or methods.

Moreover, patents have a limited lifespan. In the United States, if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years from the earliest filing date of a non-provisional patent application. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. For instance, a patent term extension based on regulatory delay may be available in the United States. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single product. Moreover, the scope of protection during the period of the patent term extension does not necessarily extend to all claims, but instead only to claims that read on the product as approved. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration and may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to launch their product earlier than might otherwise be the case, and our revenue could be reduced, possibly materially. In addition, although upon issuance in the United States a patent's term can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. Without patent protection for our current or future product candidates, including once the patent life has expired even if patents covering our product candidates are obtained, we may be open to competition from generic versions of such drugs. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Even if patents covering our current or future product candidates are obtained, once the patent term has expired for a product, we may be open to competition from generic medications. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Even if we have or obtain patents covering our products or methods, we may still be barred from making, using and selling such products or methods because of the patent rights of others. Others may have filed, and in the future may file, patent applications covering compositions, products or methods that are similar or identical to ours, which could materially affect our ability to successfully develop our technology or to successfully commercialize any approved products alone or with collaborators.

Patent applications in the United States and elsewhere are generally published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our methods and current or future product candidates could have been filed by others without our knowledge. Additionally, pending claims in patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies or related products. These patent applications may have priority over patent applications filed by us.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor, co-inventor, owner or co-owner. For example, we or our licensors may have inventorship or ownership disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our current or future product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, we may be required to pay monetary damages and we may also lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our current or future product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our current or future product candidates without infringing the intellectual property and other proprietary rights of third parties. Third parties may allege that we have infringed or misappropriated their intellectual property. Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and, even if resolved in our favor, is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our current or future product candidates. We cannot be certain that our product candidates and other proprietary technologies we may develop will not infringe existing or future patents

owned by third parties. Third parties may assert infringement claims against us based on existing or future intellectual property rights. In the United States, proving invalidity in court requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our investigational products or force us to cease some of our business operations, which could materially harm our business.

We may not be aware of patents that have already been issued and that a third party, for example, a competitor in the fields in which we are developing our product candidates, might assert are infringed by our current or future product candidates, including claims to compositions, formulations, methods of manufacture or methods of use or treatment that cover our product candidates. It is also possible that patents owned by third parties of which we are aware, but which we do not believe are relevant to our product candidates and other proprietary technologies we may develop, could be found to be infringed by one or more of our current or future product candidates. In addition, because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our current or future product candidates may infringe. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell our current or future product candidates. The pharmaceutical and biotechnology industries have produced a considerable number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that our current or future product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity may be difficult. For example, in the United States, proving invalidity in court requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents, and there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could have a material adverse effect on our business and operations. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

We may choose to challenge the enforceability or validity of claims in a third party's U.S. patent by requesting that the USPTO review the patent claims in an *ex parte* re-examination, IPR or PGR proceeding. These proceedings are expensive and may consume our time or other resources. We may choose to challenge a third party's patent in patent opposition proceedings in the European Patent Office (EPO), or other foreign patent office. The costs of these opposition proceedings could be substantial and may consume our time or other resources. If we fail to obtain a favorable result at the USPTO, EPO or other patent office, then we may be exposed to litigation by a third party alleging that the patent may be infringed by our current or future product candidates or proprietary technologies.

If we are found to infringe a third-party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required to obtain a license from such third-party in order to use the infringing

technology and continue developing, manufacturing or marketing the infringing product candidate. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, and could divert the time and attention of our technical personnel and management, cause development delays, and/or require us to develop non-infringing technology, which may not be possible on a cost-effective basis, any of which could materially harm our business. In the event of a successful claim of infringement against us, we may have to pay substantial monetary damages, including treble damages and attorneys' fees for willful infringement, pay royalties and other fees, redesign our infringing drug or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Our technology licensed from various third parties may be subject to retained rights.

Our future licensors may retain certain rights under the relevant agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our licensors limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

In addition, the United States federal government retains certain rights in inventions produced with its financial assistance under the Patent and Trademark Law Amendments Act (Bayh-Dole Act). The federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" for its own benefit. The Bayh-Dole Act also provides federal agencies with "march-in rights." March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a "nonexclusive, partially exclusive, or exclusive license" to a "responsible applicant or applicants." If the patent owner refuses to do so, the government may grant the license itself. We sometimes collaborate with academic institutions to accelerate our preclinical research or development, creating a risk that federal funds may be commingled. Therefore, we cannot be sure that any intellectual property co-developed from a collaboration with an academic institution will be free from government rights pursuant to the Bayh-Dole Act. If, in the future, we co-own or license in technology which is critical to our business that is developed in whole or in part with federal funds subject to the Bayh-Dole Act, our ability to enforce or otherwise exploit patents covering such technology may be adversely affected.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration date of a third-party patent, which might adversely affect our ability to develop and market our products.

We have reviewed certain third-party patents and patent filings that we believe may be relevant to our product candidates; and on August 1, 2024, we completed freedom-to-operate searches for the exact structures of SEP-786 and SEP-631, which did not identify any third-party patents and patent filings that we believe are relevant to our product candidates. Nevertheless, we may not be aware of patents or pending or future patent applications that, if issued, would block us from commercializing our product candidates. Thus, we cannot guarantee that our current or future product candidates, or our commercialization thereof, do not and will not infringe any third party's intellectual property.

We cannot guarantee that any patent searches or analyses that are performed, including the identification of relevant patents, the scope of patent claims or the expiration dates of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our current or future product candidates in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law,

the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our future products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our future products.

One aspect of the determination of patentability of our inventions depends on the scope and content of the "prior art," information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim.

The landscape of intellectual property related to our current or future product candidates and future products is constantly changing. Therefore, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates or their intended uses, and as a result the impact of such third-party intellectual property rights upon the patentability of our own patents and patent applications, as well as the impact of such third-party intellectual property upon our freedom to operate, is highly uncertain. Because patent applications in the United States and certain other jurisdictions are confidential for typically a period of at least 18 months after their priority date, or may not be published at all, we cannot be certain that we were the first to file any patent application related to our current or future product candidates. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain.

Furthermore, for U.S. applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For U.S. applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the U.S. patent laws, including new procedures for challenging pending patent applications and issued patents. Should we fail to win an interference challenge, a third party may obtain rights to intellectual property related to our current or future product candidates and future products.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

Because our programs may in the future require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license, or use these third-party proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

While we normally seek to obtain the right to control prosecution, maintenance and enforcement of the patents relating to our product candidates, there may be times when the filing and prosecution activities for patents and patent applications relating to our product candidates are controlled by our future licensors or collaboration partners. If any of our future licensors or collaboration partners fail to prosecute, maintain and enforce such patents and patent applications in a manner consistent with the best interests of our business, including by payment of all applicable fees for patents covering our product candidates, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensees, our future licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

We may enter into license agreements in the future with others to advance our existing or future research or allow commercialization of our current or future product candidates. These licenses may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology platform or product candidates in the future.

In addition, subject to the terms of any such license agreements, we may not have the right to control the preparation, filing, prosecution, maintenance, enforcement, and defense of patents and patent applications covering the technology that we license from third parties. In such an event, we cannot be certain that these patents and patent applications will be prepared, filed, prosecuted, maintained, enforced, and defended in a manner consistent with the best interests of our business. If our future licensors fail to prosecute, maintain, enforce, and defend such patents or patent applications, or lose rights to those patents or patent applications, the rights we have licensed may be reduced or eliminated, and our right to develop and commercialize any of our current or future product candidates that are subject of such licensed rights could be adversely affected.

Our future licensors may rely on third-party consultants or collaborators or on funds from third parties such that our future licensors are not the sole and exclusive owners of the patents we in-license. If other third parties have ownership rights to our future in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

It is possible that we may be unable to obtain necessary licenses at a reasonable cost or on reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to redesign our technology, product candidates, or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates, which could harm our business, financial condition, results of operations, and prospects significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current technology, manufacturing methods, product candidates, or future methods or products resulting in either an injunction prohibiting our manufacture or future sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

Disputes may arise between us and our future licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patents and other rights to third parties;

- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- our right to transfer or assign the license;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our future licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we license in the future prevent or impair our ability to maintain our licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

In spite of our best efforts, our future licensors might conclude that we materially breached our license agreements and might therefore terminate the license agreements, thereby removing our ability to develop and commercialize products and technology covered by these license agreements. If these in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products identical to ours. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

From time to time, we may be required to license technologies relating to our programs from additional third parties to further develop or commercialize our current or future product candidates. Should we be required to obtain licenses to any third-party technology, including any such patents required to manufacture, use or sell our product candidates, such licenses may not be available to us on commercially reasonable terms, or at all. The inability to obtain any third-party license required to develop or commercialize any of our product candidates could cause us to abandon any related efforts, which could seriously harm our business and operations.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful. Further, our issued patents could be found invalid or unenforceable if challenged in court.

Competitors may infringe our intellectual property rights. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we own or license is not valid, is unenforceable and/or is not infringed. If we or any of our potential future collaborators were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent is invalid and/or unenforceable in whole or in part. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including but not limited to lack of novelty, obviousness, or insufficient written description or enablement. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution.

Third parties may also raise similar invalidity claims before the USPTO or patent offices abroad, even outside the context of litigation. Such mechanisms include re-examination, PGR, IPR, derivation proceedings, interference proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such

proceedings could result in loss of rights to, the revocation of, cancellation of or amendment to our patents in such a way that they no longer cover our technology or platform, or any product candidates that we may develop. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. There is also no assurance that there is not prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim in our patents and patent applications, which may, nonetheless, ultimately be found to affect the validity or enforceability of a patent claim. If a third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates or other intellectual property that we may develop. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened or questioned, it could dissuade companies from collaborating with us to license, develop or commercialize our current or future product candidates. Such a loss of patent protection would have a material adverse impact on our business, financial condition, results of operations and prospects.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other legal proceedings relating to our intellectual property rights, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or other proceedings. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

We may be subject to claims that we or our employees have misappropriated the intellectual property, including confidential information, know-how or trade secrets, of a third-party, or claiming ownership of what we regard as our own intellectual property.

Many of our employees, consultants and contractors were previously employed at or engaged by other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, consultants and contractors executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we try to ensure that our employees, consultants and contractors do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may be subject to claims that we have wrongfully hired an employee from a competitor or that we or these employees, consultants or contractors have used or disclosed such third-party intellectual property, including know-how, trade secrets or other proprietary information, to us. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, it may a have negative impact on our business and our ability to develop product candidates or commercialize our technology. In addition to paying substantial monetary damages, we may lose valuable intellectual property rights or personnel, or access to consultants and contractors. Even if we are successful in defending against such claims, litigation could incur substantial costs and be a distraction to management and scientific personnel.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we

may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our senior management and scientific personnel.

We may license intellectual property rights from third parties. Such licenses may be subject to early termination if we fail to comply with our obligations in our licenses with third parties, which could result in the loss of rights or technology that are material to our business.

We may become a party to licenses that give us rights to third-party intellectual property or technology that is necessary or useful for our business, and we may enter into additional licenses in the future. Under these license agreements, we are or may become obligated to pay the licensor fees, which may include annual license fees, milestone payments, royalties, a percentage of revenues associated with the licensed technology and a percentage of sublicensing revenue. These fees may be significant, which could make it difficult for us to achieve or maintain profitability. In addition, under certain of such agreements, we are or may become required to diligently pursue the development of products using the licensed technology. If we fail to comply with these obligations, including due to our use of the intellectual property licensed to us in an unauthorized manner, and fail to cure our breach within a specified period of time, the licensor may have the right to terminate the applicable license, in which event we could lose valuable rights and technology that are material to our business, harming our ability to develop, manufacture and/or commercialize our platform, products or product candidates.

In addition, the agreements under which we license intellectual property or technology to or from third-parties can be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire. The failure to obtain or in-license any compositions, methods of use, processes or other third-party intellectual property rights at a reasonable cost or on reasonable terms, could harm our business. If we fail to obtain licenses to necessary third-party intellectual property rights, we may need to cease use of the compositions or methods covered by such third-party intellectual property rights. Furthermore, we may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by government patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned and licensed patents and/or applications and any patent rights we may own or license in the future. We rely on our outside counsel, patent annuity service providers, or our licensing

partners to pay these fees due to non-U.S. patent agencies. If these fees are not paid to the USPTO or the non-U.S. patent agencies when due, our rights to such patents or patent applications may be abandoned or otherwise materially impaired.

The USPTO and various non-U.S. government patent agencies require compliance with numerous procedural, documentary, and other similar provisions during the patent application process. For example, many jurisdictions, including the U.S. and China, require a foreign filing license before seeking patent protection in a jurisdiction outside of the jurisdiction of which the inventor is a citizen or in which the invention was made. Each jurisdiction's laws regarding foreign filing licenses vary and may even conflict. We employ reputable law firms in foreign jurisdictions and other professionals to help us comply and we are also dependent on any licensors to take the necessary action to comply with these requirements with respect to our intellectual property. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction.

Additional non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, potential competitors might be able to enter the market and this circumstance could harm our business.

We may not be able to protect our intellectual property rights throughout the world, which could negatively impact our business.

Filing, prosecuting, maintaining, enforcing, and defending patent applications and patents covering our current and any future product candidates worldwide is prohibitively expensive, so we will pursue patents in a limited number of jurisdictions. Moreover, our intellectual property rights in some jurisdictions outside the United States can have a different scope and strength than do those in the United States. Consequently, we will not be able to prevent third parties from practicing our inventions in all jurisdictions, or from selling or importing in and into various jurisdictions products made using our inventions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own product candidates and, further, may export otherwise infringing product candidates to territories where we may obtain patent protection, but where patent enforcement is not as strong as that in the United States. Further, these product candidates may compete with our product candidates in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems protecting and defending intellectual property rights in jurisdictions outside the United States. The legal systems of certain jurisdictions do not favor the enforcement of patents, trade secrets and other intellectual property rights, particularly those relating to pharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, including the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patents and other intellectual property rights in jurisdictions outside the United States could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore, such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Similarly, if our trade secrets are disclosed in a foreign jurisdiction, competitors worldwide could have access to our proprietary information and we may be without satisfactory recourse. Such disclosure could have a material adverse effect on our business.

Our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in intellectual property laws in the United States and around the world. For example, in Europe, a new

unitary patent system took effect June 1, 2023, which will significantly impact European patents, including those granted before the introduction of such a system. Under the unitary patent system, European applications have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court (UPC). As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation. Patents granted before the implementation of the UPC will have the option of opting out of the jurisdiction of the UPC and remaining as national patents in the UPC countries. Patents that remain under the jurisdiction of the UPC will be potentially vulnerable to a single UPC-based revocation challenge that, if successful, could invalidate the patent in all countries who are signatories to the UPC. We cannot predict with certainty the long-term effects of any potential changes. Certain jurisdictions, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties under certain circumstances. In those jurisdictions, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. In addition, many jurisdictions limit the enforceability of patents against government agencies or government contractors. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

If we do not obtain patent term extension and data exclusivity for any product candidates we may develop, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop and our technology, one or more U.S. patents that we license or may own in the future may be eligible for limited patent term extension under the Hatch-Waxman Amendments. Under certain circumstances the Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved product, a method for using it or a method for manufacturing it may be extended. The application for the extension must be submitted prior to the expiration of the patent for which extension is sought and within 60 days of FDA approval. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable patent term extension or the scope of patent protection afforded could be less than we request. In addition, to the extent we wish to pursue patent term extension based on a patent that we in-license from a third party, we would need the cooperation of that third party. If we are unable to obtain patent term extension or the term of any such extension is less than we request, we may be open earlier than projected to competition from competitive products, including generics or biosimilars following our patent expiration, and our revenue could be reduced earlier than projected. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of our trade secrets and other proprietary information. If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary information and confidential know-how that we elect not to patent, including processes for which patents are difficult to enforce, and any other elements of our current or future product candidates, technology and product discovery, development processes and drug discovery platform that involve proprietary know-how, information, or technology that is not covered by patents. In particular, our trade secrets, confidential know-how and other proprietary information includes our proprietary Native Complex Platform™ drug discovery platform, which we do not plan to patent. Any disclosure, either

intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Because we expect to rely on third parties in the development and manufacture of our product candidates, we must, at times, share trade secrets with them. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Trade secrets, confidential know-how and proprietary information, however, may be difficult to protect. We seek to protect our trade secrets, confidential know-how and proprietary information, including our proprietary processes and drug discovery platform, in part, by entering into confidentiality agreements with our employees, consultants, outside scientific advisors, contractors, and collaborators. With our consultants, contractors, and outside scientific collaborators, these agreements typically include invention assignment obligations. Although we use reasonable efforts to protect our trade secrets, we cannot provide any assurances that all such agreements have been duly executed, and notwithstanding the existence of a confidentiality agreement our employees, consultants, outside scientific advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information, including to competitors. In addition, competitors or other third parties may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Despite our efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. Furthermore, the laws of some foreign jurisdictions do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results, and financial condition.

Our intellectual property rights do not necessarily protect against all potential threats to our business.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business. These risks and uncertainties include the following:

- others may be able to make compounds or formulations that are similar to our current or future product candidates but that are not covered by the claims of any patents, should they issue, that we own or control;
- we or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or control;
- we might not have been the first to file patent applications covering certain of our current or future product candidates or inventions we own or control;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- pending patent applications that we own or control may not lead to issued patents;
- issued patents that we own or control may be held invalid or unenforceable as a result of legal challenges;

- our competitors might conduct research and development activities in the United States and other jurisdictions that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in jurisdictions where we do not have patent rights and then use the information learned from such activities to develop competitive drugs for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

If our trademarks and trade names are not adequately protected, we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our current or future trademarks or trade names may be challenged, opposed, infringed, circumvented, invalidated, cancelled, declared generic, determined to be not entitled to registration, or determined to be infringing on other marks. During trademark registration proceedings, we may receive rejections of our applications by the USPTO or in foreign jurisdictions. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many other jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Trademark litigation could be expensive. In addition, we could be found liable for significant monetary damages, including treble damages, disgorgement of profits and attorneys' fees, if we are found to have willfully infringed a trademark. We may not be able to protect our exclusive right to trademarks or trade names or may be forced to stop using these names, which we need for name recognition by potential collaborators or customers in our markets of interest. If we are unable to establish name recognition based on our trademarks or trade names, we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks or trade names to third parties, such as distributors. Though these agreements may provide guidelines for how our trademarks or trade names may be used, a breach of these agreements or misuse of our trademarks or tradenames by third parties may jeopardize our rights in or diminish the goodwill associated with our trademarks or trade names.

Moreover, any name we have proposed to use with our product candidates in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA or equivalent body. Furthermore, in many jurisdictions, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark.

We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Furthermore, assertions of potential trademark infringement or possible market confusion may lead to coexistence agreements in order to avoid costly disputes related to our trademarks. As a consequence, we may be forced to amend the list of goods and services covered by our trademarks more narrowly than as originally filed and intended, which could adversely affect our ability to establish name recognition. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, domain name

or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and prospects.

Rights to improvements to our product candidates may be held by third parties.

In the course of testing our current or future product candidates, we may enter into agreements with third parties to conduct clinical testing, which may provide that improvements to our product candidates may be owned solely by a third party or jointly between the parties. If we determine that rights to such improvements owned solely by a third party are necessary to commercialize our product candidates or maintain our competitive advantage, we may need to obtain a license from such third party in order to use the improvements and continue developing, manufacturing or marketing the product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain such a license, it could be granted on non-exclusive terms, thereby giving our competitors and other third parties access to the same technologies licensed to us. Failure to obtain a license on commercially reasonable terms or at all, or to obtain an exclusive license, could prevent us from commercializing our current or future product candidates or force us to cease some of our business operations, which could materially harm our business. If we determine that rights to improvements jointly owned between us and a third party are necessary to commercialize our product candidates or maintain our competitive advantage, we may need to obtain an exclusive license from such third party. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such improvements, such co-owners may be able to license their rights to other parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of our intellectual property in order to enforce such intellectual property against other parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

The use of new and evolving technologies, such as artificial intelligence, in our offerings may present risks and challenges that can impact our business including by posing security risks to our confidential information, proprietary information, and personal data.

Issues in the development and use of artificial intelligence, combined with an uncertain regulatory environment, may result in reputational harm, liability, or other adverse consequences to our business operations. As with many technological innovations, artificial intelligence presents risks and challenges that could impact our business. We may adopt and integrate artificial intelligence tools into our processes for specific use cases reviewed by legal and information security. If we enable or offer solutions that draw controversy due to perceived or actual negative societal impact, we may experience brand or reputational harm, competitive harm or legal liability. The use of certain artificial intelligence technology can give rise to intellectual property risks, including compromises to proprietary intellectual property and intellectual property infringement. Additionally, we expect to see increasing government and supranational regulation related to artificial intelligence use and ethics, which may also significantly increase the burden and cost of research, development and compliance in this area. For example, several jurisdictions around the globe, including Europe and certain U.S. states, have proposed enacted, or are considering laws governing the development and use of artificial intelligence, such as the EU's AI Act. We expect other jurisdictions will adopt similar laws. Additionally, certain privacy laws extend rights to consumers (such as the right to delete certain personal data) and regulate automated decision making, which may be incompatible with our use artificial intelligence. These obligations may make it harder for us to conduct our business using artificial intelligence, lead to regulatory fines or penalties, require us to change our business practices, retrain our artificial intelligence, or prevent or limit our use of artificial intelligence. For example, the FTC has required other companies to turn over (or disgorge) valuable insights or trainings generated through the use of artificial intelligence where they allege the company has violated privacy and consumer protection laws. If we cannot use artificial intelligence or that use is restricted, our business may be less efficient, or we may be at a competitive disadvantage. The rapid evolution of artificial intelligence will require the application of significant resources to design, develop, test and maintain our products and services to help ensure that artificial intelligence is implemented in accordance with applicable law and regulation and in a socially responsible manner and to minimize any real or perceived

unintended harmful impacts. Our vendors may in turn incorporate artificial intelligence tools into their own offerings, and the providers of these artificial intelligence tools may not meet existing or rapidly evolving regulatory or industry standards, including with respect to data protection, privacy, and security. Further, bad actors around the world use increasingly sophisticated methods, including the use of artificial intelligence, to engage in illegal activities involving the theft and misuse of personal data, confidential information and intellectual property. Any of these effects could damage our reputation, result in the loss of valuable property and information, cause us to breach applicable laws and regulations, and adversely impact our business.

Risks Related to this Offering, Ownership of Our Common Stock, and Operating as a Public Company

We do not know whether an active, liquid and orderly trading market will develop for our common stock or what the market price of our common stock will be, and, as a result, it may be difficult for you to sell your shares of our common stock.

Prior to this offering, there was no public trading market for our common stock. If a market for our common stock does not develop or is not sustained, it may be difficult for you to sell your shares of our common stock at an attractive price or at all. We cannot predict the prices at which our common stock will trade. It is possible that in one or more future periods our results of operations may be below the expectations of public market analysts and investors, and, as a result of these and other factors, the price of our common stock may fall. An inactive market may also impair our ability to raise capital by selling our common stock and our ability to acquire other companies, products, or technologies by using our common stock as consideration.

You will incur immediate and substantial dilution as a result of this offering.

If you purchase common stock in this offering, you will incur immediate and substantial dilution of approximately $7.50 per share, representing the difference between the assumed initial public offering price of $16.00 per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, and our pro forma as adjusted net tangible book value per share as of June 30, 2024 and assumes the automatic conversion of all outstanding shares of our convertible preferred stock upon the closing of this offering. That is because the price that you pay will be substantially greater than the pro forma as adjusted net tangible book value per share of the common stock that you acquire. This dilution is due in large part to the fact that our earlier investors paid substantially less than the initial public offering price when they purchased their shares of our capital stock. You will experience additional dilution if the underwriters exercise their option to purchase additional shares in this offering, when those holding stock options exercise their right to purchase common stock under our equity incentive plans, upon the vesting of outstanding restricted stock awards or when we otherwise issue additional shares of our common stock. See the section titled “Dilution” for a further description of the dilution you will experience immediately after this offering.

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The initial public offering price for our common stock was determined through negotiations with the underwriters. This initial public offering price may vary from the market price of our common stock after the offering. As a result, you may not be able to sell your common stock at or above the initial public offering price. The market price for our common stock may be influenced by those factors discussed in this “Risk Factors” section and many others, some of which may include:

- the success of existing or new competitive product candidates or technologies;
- the commencement, enrollment, completion and results of preclinical studies and clinical trials for our current and future product candidates;
- adverse results or delays, suspensions or terminations in future preclinical studies or clinical trials;

- unanticipated serious safety concerns related to our current or future product candidates
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval of our current or future product candidates or the failure of a regulatory authority to accept data from preclinical studies or clinical trials conducted in other countries;
- our failure to commercialize our current or future product candidates, if approved;
- failure or discontinuation of any of our development and research programs;
- results of any preclinical studies, clinical trials or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors;
- commencement or termination of collaborations for our product development and research programs;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other intellectual property or proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our research programs, clinical development programs or product candidates that we may develop;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts, if any, that cover our stock;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or other stockholders;
- expiration of market stand-off or lock-up agreements;
- our ability to effectively manage our growth;
- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- trading volume of our common stock;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- significant lawsuits, including patent or stockholder litigation;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, political, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

In addition, the stock market in general, and the market for pharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the

operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources.

We have wide discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have wide discretion in the application of the net proceeds, including for any of the purposes described in "Use of Proceeds." Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds, with only limited information concerning management's specific intentions. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Future sales of our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Upon the completion of this offering, 36,940,294 shares of our common stock will be outstanding (or 38,580,919 shares of common stock will be outstanding assuming exercise in full of the underwriters' option to purchase additional shares), based on our shares outstanding as of June 30, 2024. All shares of our common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The resale of the remaining 25,971,648 shares, or 70.3% of our outstanding shares after this offering, is currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters. However, subject to applicable securities law restrictions and excluding shares of our restricted stock that will remain unvested, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. Shares of our unvested restricted stock subject to repurchase or forfeiture that were issued and outstanding as of the date of this prospectus will become available for sale immediately upon the vesting of such shares, as applicable, and the expiration of any applicable market stand-off or lock-up agreements. Shares issued upon the exercise of stock options pursuant to future awards that may be granted under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market stand-off and lock-up agreements and Rule 144 and Rule 701 under the Securities Act. For more information see the section titled "Shares Eligible for Future Sale" included elsewhere in this prospectus.

Upon the completion of this offering, the holders of approximately 23,894,092 shares, or 64.7%, of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register the offer and sale of all shares of our common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration

rights and shares to be issued under our equity incentive plans, they can be freely sold in the public market upon issuance, subject to the lock-up agreements described in the section titled "Underwriting" included elsewhere in this prospectus.

In addition, in the future, we may issue additional shares of our common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

We are an "emerging growth company" and a "smaller reporting company," and the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In addition, as an emerging growth company, we are only required to provide two years of audited financial statements in this prospectus. We could be an emerging growth company for up to five years following the completion of this offering, although circumstances could cause us to lose that status earlier, including if we are deemed to be a "large accelerated filer," which occurs when the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30, or if we have total annual gross revenue of $1.235 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31, or if we issue more than $1.0 billion in non-convertible debt during any three-year period before that time, in which case we would no longer be an emerging growth company immediately. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements of Section 404;
- not being required to comply with the requirements of the Public Company Accounting Oversight Board regarding the communication of critical audit matters in the auditor's report on the financial statements.
- providing only two years of audited financial statements in addition to any required unaudited interim financial statements and a correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure in this prospectus;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In this prospectus, we have not included all of the executive compensation-related information that would be required if we were not an emerging growth company.

Even after we no longer qualify as an emerging growth company, we could still qualify as a "smaller reporting company," which would allow us to take advantage of many of the same exemptions from disclosure requirements and reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can also take advantage of an extended transition period for complying with new or revised accounting standards until such time as those standards apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards, and therefore we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and our common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Exchange Act, which will require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and The Nasdaq Global Market (Nasdaq) to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial reporting controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of this offering. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have an adverse effect on our business. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Insiders will continue to have substantial influence over us after this offering, which could limit your ability to affect the outcome of key transactions, including a change of control.

After this offering, our directors and executive officers and their affiliates will beneficially own shares representing approximately 34.5% of our outstanding common stock. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our

organizational documents or approval of any merger, sale of assets or other major corporate transaction. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

We do not expect to pay any dividends for the foreseeable future. Investors in this offering may never obtain a return on their investment.

You should not rely on an investment in our common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. In addition, any future credit facility may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our common stock.

If we fail to establish and maintain proper and effective internal control over financial reporting, our operating results and our ability to operate our business could be harmed.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. In connection with this offering, we intend to begin the process of documenting, reviewing and improving our internal controls and procedures for compliance with Section 404 of the Sarbanes-Oxley Act, which will require annual management assessment of the effectiveness of our internal control over financial reporting starting with our second filing of an Annual Report on Form 10-K.

Implementing any appropriate changes to our internal controls may distract our officers and employees, entail substantial costs to modify our existing processes and take significant time to complete. These changes may not, however, be effective in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy or consequent inability to produce accurate financial statements on a timely basis could increase our operating costs and harm our business. In addition, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis cause investors to lose confidence in the accuracy and completeness of our financial reports and could cause the market price of our common stock to decline significantly.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the closing of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

If we experience material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

We may in the future discover material weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

We, and our independent registered public accounting firm, were not required to perform an evaluation of our internal control over financial reporting as of December 31, 2023 in accordance with the provisions of the Sarbanes-Oxley Act. Accordingly, we cannot assure you that we will not in the future identify material weaknesses. Material weaknesses may exist when we become required to report on the effectiveness of our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act after the completion of this offering.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline, and we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC or other regulatory authorities.

Provisions in our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and amended and restated bylaws, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and amended and restated bylaws, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, and Delaware law contain provisions that may have the effect of discouraging, delaying or preventing a change in control of us or changes in our management that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our board of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;

- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- provide that our directors may be removed only for cause;
- specify that no stockholder is permitted to cumulate votes at any election of directors;
- expressly authorized our board of directors to make, alter, amend or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate of incorporation and amended and restated bylaws.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock.

In addition, because we are incorporated in the State of Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law (DGCL), which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated bylaws which will become effective upon the effectiveness of this registration statement of which this prospectus forms a part designate certain courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated bylaws which will become effective upon effectiveness of the registration statement of which this prospectus forms a part provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claims for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of, or a claim based on, fiduciary duty owed by any of our current or former directors, officers, and employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws (including the interpretation, validity or enforceability thereof) or (iv) any action asserting a claim that is governed by the internal affairs doctrine (Delaware Forum Provision). The Delaware Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. Our amended and restated bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the sole and exclusive forum for resolving any complaint asserting a cause or causes of action arising under the Securities Act (Federal Forum Provision). In addition, our amended and restated bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provisions; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

The Delaware Forum Provision and the Federal Forum Provision in our amended and restated bylaws may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, the forum selection clauses in our amended and restated bylaws may limit our stockholders' ability to bring a claim in a judicial

forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage such lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. In addition, while the Delaware Supreme Court and other state courts have upheld the validity of federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court, there is uncertainty as to whether other courts will enforce our Federal Forum Provision. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on stockholders who assert that the provision is not enforceable or invalid. The Court of Chancery of the State of Delaware and the federal district courts of the United States may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

General Risk Factors

Unfavorable global economic conditions could adversely affect our business, financial condition, stock price, and results of operations.

The global credit and financial markets have experienced extreme volatility and disruptions (including as a result of actual or perceived changes in interest rates, inflation and macroeconomic uncertainties), which has included severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, high inflation, uncertainty about economic stability, global supply chain disruptions, and increases in unemployment rates. The financial markets and the global economy may also be adversely affected by the current or anticipated impact of military conflict, including the ongoing conflicts between Russia and Ukraine, and Israel and Hamas, terrorism, or other geopolitical events. Sanctions imposed by the United States and other countries in response to such conflicts, including the one in Ukraine, may also continue to adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. A severe or prolonged economic downturn could result in a variety of risks to our business, including a decrease in the demand for our product candidates and in our ability to raise additional capital when needed on acceptable terms, if at all. There are also current geopolitical tensions with China that may affect our operations. For example, there has been proposed United States legislation, such as the bill titled the BIOSECURE Act, that may restrict the ability of United States pharmaceutical companies to purchase services or products from, or otherwise collaborate with, certain Chinese biotechnology companies of concern without losing the ability to contract with, or otherwise receive funding from, the United States government. We continue to assess the legislation as it develops to determine whether it could have an effect on our contractual relationships. Furthermore, any disruptions to our supply chain as a result of unfavorable global economic conditions, including due to geopolitical conflicts or public health crises, could negatively impact the timely execution of our ongoing and future clinical trials. In addition, current inflationary trends in the global economy may impact salaries and wages, costs of goods and transportation expenses, among other things, and recent and potential future disruptions in access to bank deposits or lending commitments due to bank failures may create market and economic instability. We cannot anticipate all of the ways in which the foregoing, and the current economic climate and financial market conditions generally, could adversely impact our business.

Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults, or non-performance by financial institutions or transactional counterparties, could adversely affect our current and projected business operations and our financial condition and results of operations.

Actual events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions, transactional counterparties or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market-wide liquidity problems.

Although we assess our banking and customer relationships as we believe necessary or appropriate, our access to funding sources and other credit arrangements in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impaired by factors that affect our Company, the financial institutions with which we have credit agreements or arrangements directly, or the financial services industry or economy in general. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services industry or financial markets, or concerns or negative expectations about the prospects for companies in the financial services industry.

The results of events or concerns that involve one or more of these factors could include a variety of material and adverse impacts on our current and projected business operations and our financial condition and results of operations. These could include, but may not be limited to, the following:

- delayed access to deposits or other financial assets or the uninsured loss of deposits or other financial assets;
- potential or actual breach of statutory, regulatory or contractual obligations, including obligations that require us to maintain letters of credit or other credit support arrangements;
- termination of cash management arrangements and/or delays in accessing or actual loss of funds subject to cash management arrangements.

In addition, investor concerns regarding the United States or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability to meet our operating expenses, financial obligations or fulfill our other obligations, result in breaches of our financial and/or contractual obligations or result in violations of federal or state wage and hour laws. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity, our current and/or planned business operations, and our current or projected financial condition and results of operations.

In addition, any further deterioration in the macroeconomic economy or financial services industry could lead to losses or defaults by our suppliers, which in turn, could have a material adverse effect on our current and/or planned business operations and our current or projected results of operations and financial condition. For example, a customer may fail to make payments when due, default under their agreements with us, become insolvent or declare bankruptcy, or a supplier may determine that it will no longer deal with us as a customer. In addition, a customer or supplier could be adversely affected by any of the liquidity or other risks that are described above as factors that could result in material adverse impacts on the Company, including but not limited to delayed access or loss of access to uninsured deposits or loss of the ability to draw on existing credit facilities involving a troubled or failed financial institution. Any customer, collaborator or supplier bankruptcy or insolvency, or the failure of any customer or collaborator to make payments when due, or any breach or default by a customer, collaborator or supplier, or the loss of any significant supplier or collaborator relationships, could result in material losses to the Company and may have a material adverse impact on our business.

We may not be able to satisfy listing requirements of Nasdaq or obtain or maintain a listing of our common stock on Nasdaq.

If, after listing, we fail to satisfy Nasdaq's continued listing requirements, such as the corporate governance requirements or the minimum closing bid price requirement. Nasdaq may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide

no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq's listing requirements.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

We may become involved in litigation that could divert management's attention and harm our business, and insurance coverage may not be sufficient to cover all costs and damages.

From time to time we may be subject to litigation claims through the ordinary course of our business operations regarding, but not limited to, securities litigation, employment matters, security of patient and employee personal data, contractual relations with collaborators and licensors and intellectual property rights. In the past, securities class action litigation has often followed certain significant business transactions, such as the sale of a company or announcement of any other strategic transaction, the announcement of negative events, such as negative results from clinical trials, or periods of volatility in the market price of a company's securities. These events may also result in or be concurrent with investigations by the SEC. We may be exposed to such litigation or investigation even if no wrongdoing occurred. Litigation and investigations are usually expensive and divert management's attention and resources, which could adversely affect our business and cash resources and our ability to consummate a potential strategic transaction or the ultimate value our stockholders receive in any such transaction.

Our insurance policies are expensive and only protect us from some business risks, which will leave us exposed to significant uninsured liabilities.

While we maintain commercial insurance at a level we believe is appropriate against certain risks commonly insured in the industry in which we operate, there is no guarantee that our insurer will cover costs or that we will be able to obtain the desired level of coverage on acceptable terms in the future. Some of the policies we currently maintain include property, general liability, crime insurance, workers' compensation, and directors' and officers', employment practices and fiduciary liability insurance, clinical trial insurance, transportation insurance and umbrella insurance. We do not know, however, if we will be able to maintain insurance with adequate levels of coverage. Changes in the market conditions and our business operations may necessitate the addition of new insurance policies or change of our existing insurance policies. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our financial position and results of operations.

We also expect that operating as a U.S. public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, on our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would negatively affect our business, financial condition and results of operations.

Our operations are vulnerable to interruption by disasters, terrorist activity, pandemics and other events beyond our control, which could harm our business.

Our facilities are located in California. We have not undertaken a systematic analysis of the potential consequences to our business and financial results from a major flood, power loss, terrorist activity, pandemics or other regional or global disasters and generally do not have a recovery plan for such events. In addition, we do not carry sufficient insurance to compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could harm our business. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

Increased attention to, and evolving expectations for, environmental, climate change, social, and governance initiatives could increase our costs, harm our reputation, or otherwise adversely impact our business.

Companies across industries are facing increasing scrutiny from a variety of stakeholders related to their environmental, climate change, social, and governance (ESG) and sustainability practices. Expectations regarding voluntary ESG initiatives and disclosures may result in increased costs (including but not limited to increased costs related to compliance, stakeholder engagement, contracting and insurance), enhanced compliance or disclosure obligations, or other adverse impacts to our business, financial condition, or results of operations.

While we may at times engage in voluntary initiatives (such as voluntary disclosures, certifications, or goals, among others) to improve the ESG profile of the Company, such initiatives may be costly and may not have the desired effect. Moreover, we may not be able to successfully complete such initiatives due to factors that are within or outside of our control. Even if this is not the case, our actions may subsequently be determined to be insufficient by various stakeholders, and we may be subject to investor or regulator engagement on our ESG efforts, even if such initiatives are currently voluntary.

Certain market participants, including major institutional investors and capital providers, use third-party benchmarks and scores to assess companies' ESG profiles in making investment or voting decisions. Unfavorable ESG ratings could lead to increased negative investor sentiment towards us, which could negatively impact our share price as well as our access to and cost of capital. To the extent ESG matters negatively impact our reputation, it may also impede our ability to compete as effectively to attract and retain employees, which may adversely impact our operations.

In addition, we expect there will likely be increasing levels of regulation, disclosure-related and otherwise, with respect to ESG matters. For example, the SEC has issued rules that require companies to provide significantly expanded climate-related disclosures in their periodic reporting, which may require us to incur significant additional costs to comply, including the implementation of significant additional internal controls processes and procedures regarding matters that have not been subject to such controls in the past, and impose increased oversight obligations on our management and board of directors. These and other changes in stakeholder expectations will likely lead to increased costs as well as scrutiny that could heighten all of the risks identified in this risk factor. Additionally, our business partners may be subject to similar expectations, which may augment or create additional risks, including risks that may not be known to us.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business," contains express or implied forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the initiation, timing, progress, results and costs of conducting our research and development programs and our current and future preclinical studies and anticipated clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our current and future programs;
- our ability to demonstrate, and the timing of, preclinical proof-of-concept *in vivo* and *ex vivo* for multiple programs;
- our ability to advance any product candidates that we may identify and successfully complete any clinical studies, including the manufacture of any such product candidates;
- the timing, scope and likelihood of regulatory filings and approvals, including timing of INDs or comparable foreign applications, and final FDA approval of our current product candidates or any future product candidates;
- the timing, scope or likelihood of foreign regulatory filings and approvals;
- the implementation of our business model, and strategic plans for our business, product candidates, and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and other product candidates we may develop, including the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties, and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;
- developments relating to our competitors and our industry;
- our ability to leverage programs within our initial target indications and to progress additional programs to further develop our pipeline;
- our ability of our preclinical studies and clinical trials to demonstrate safety and efficacy of our product candidates, and other positive results;
- our ability to identify and enter into future license agreements and collaborations and the potential benefits of such agreements and collaborations;
- our ability to rely on third-party manufacturers and successfully manufacture product candidates for preclinical use, clinical trials and on a larger scale for commercial use, if approved;
- our ability to realize the benefits of collaborations for the development and commercialization of current and future product candidates;
- our ability to commercialize any current and future product candidates;
- developments related to our proprietary Native Complex Platform™;

- regulatory developments in the United States and foreign countries;
- our ability to obtain funding for our operations necessary to complete further development and commercialization of our product candidates;
- the size and growth potential of the markets for our current and future product candidates and our ability to serve those markets;
- our ability to attract and retain key scientific and management personnel;
- our expectations regarding the period during which we will remain an emerging growth company under the JOBS Act;
- our anticipated use of proceeds from this offering, estimates of our expenses, capital requirements, and needs for additional financing;
- the impact of global economic and political developments on our business, including rising inflation and capital market disruptions, economic sanctions and economic slowdowns or recessions that may result from such developments which could harm our research and development efforts as well as the value of our common stock and our ability to access capital markets;
- the ultimate impact of health epidemics, pandemics, and other widespread outbreaks of contagious disease, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations, including but not limited to our clinical trials, our research programs, healthcare systems or the global economy as a whole; and
- other risks and uncertainties, including those listed under the section titled "Risk Factors."

In some cases, you can identify forward-looking statements by terminology such as "anticipates," "believes," "continue," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "should" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the section titled "Risk Factors" and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus forms a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. Statements that contain "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

This prospectus also contains estimates, projections and other information concerning our industry, our business and the markets for our product candidates. Information that is based on estimates, forecasts,

projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from our own internal estimates and research as well as from reports, research surveys, studies, and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors, including those discussed under the section titled “Risk Factors” and elsewhere in this prospectus.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of 10,937,500 shares of our common stock in this offering will be approximately $157.9 million (or approximately $182.3 million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase or decrease in the assumed initial public offering price of $16.00 per share, the estimated midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the net proceeds to us from this offering by $10.2 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase or decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease, as applicable net proceeds to us from this offering by $14.9 million, assuming no change in the assumed initial public offering price per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the offering price or the number of shares by these amounts would have a material effect on our intended uses of the net proceeds from this offering, although it may impact the amount of time prior to which we may need to seek additional capital.

Combined with our cash, cash equivalents, and marketable securities as of October 1, 2024, this additional $157.9 million will provide for capital resources of approximately $294.1 million. This estimate of our capital resources was prepared by management based upon internal reporting, is preliminary and unaudited, and may be revised as a result of management's further review of our results as of and for the quarter ended September 30, 2024, as well as the actual net proceeds received from this offering. We have not yet completed our normal interim review procedures as of and for the quarter ended September 30, 2024.

We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities, as follows:

- approximately $54 million to advance the continued development of SEP-786, our lead product candidate from our PTH1R program through completion of a Phase 2 clinical trial in hypoparathyroidism patients, and additional molecules targeting PTH1R;
- approximately $24 million to advance the development of SEP-631 through completion of a Phase 1 clinical trial, and additional small molecules within our MRGPRX2 program;
- approximately $41 million for other research and development activities, including our TSHR and incretin receptor programs, other new GPCR programs, and continued innovation of our Native Complex Platform™; and
- the remainder to fund working capital and other general corporate purposes.

As of June 30, 2024, we had $155.7 million in cash, cash equivalents, and marketable securities. Based on our current plans, we believe our existing cash, cash equivalents, and marketable securities, together with the net proceeds from this offering, will be sufficient to fund our operations and capital expenditure requirements into 2027.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth

above. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our research and development, the addition of new programs or changes to plans for existing programs, as well as any collaborations that we may enter into with third parties or strategic opportunities that become available to us, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We expect the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities, will not be sufficient for us to advance any of our programs through regulatory approval, and we will need to raise additional capital to complete the development and potential commercialization of any of our programs.

Our management will retain broad discretion in the application of the net proceeds we receive from our initial public offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation instruments, including short-term and long-term interest-bearing instruments, investment-grade securities, and direct or guaranteed obligations of the United States government. We cannot predict whether the proceeds invested will yield a favorable return.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business, and therefore we do not anticipate paying cash dividends on our common stock in the foreseeable future. Any future determination regarding the declaration and payment of dividends, if any, will be at the discretion of our board of directors, subject to applicable laws, and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

In addition, our ability to pay cash dividends on our capital stock in the future may be limited by the terms of any future debt or preferred securities we issue or any credit facilities we enter into.

CAPITALIZATION

The following table sets forth our cash, cash equivalents, and marketable securities and our capitalization as of June 30, 2024:

- on an actual basis;
- on a pro forma basis to give effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity, each of which will occur immediately prior to the completion of this offering, and (ii) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to reflect: (i) the pro forma adjustments set forth above, and (ii) the issuance and sale of 10,937,500 shares of our common stock in this offering at an assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read the information in this table together with the sections titled "Prospectus Summary—Summary Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus.

	As of June 30, 2024		
	Actual	Pro Forma	Pro Forma As Adjusted[1]
	(in thousands, except for share and per share data) (unaudited)		
Cash and cash equivalents	$ 131,172	$ 131,172	$ 289,022
Marketable securities	17,665	17,665	17,665
Marketable securities, non-current	6,852	6,852	6,852
Total cash, cash equivalents and marketable securities	$ 155,689	$ 155,689	$ 313,539
Convertible preferred stock, $0.001 par value; 196,657,452 shares authorized; 196,657,452 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	224,157	—	—
Stockholders' (deficit) equity:			
Convertible preferred stock, $0.001 par value; no shares authorized, issued or outstanding, actual; 10,000,000 authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, $0.001 par value; 260,590,689 shares authorized; 3,163,020 shares issued and outstanding; 784,550 shares subject to repurchase, actual; 500,000,000 shares authorized, 26,002,794 shares issued and outstanding; 784,550 shares subject to repurchase, pro forma; 500,000,000 shares authorized, 36,940,294 shares issued and outstanding; 784,550 shares subject to repurchase, pro forma as adjusted	3	26	37

	As of June 30, 2024		
	Actual	Pro Forma	Pro Forma As Adjusted[1]
	(in thousands, except for share and per share data) (unaudited)		
Additional paid-in capital	9,425	233,559	391,398
Accumulated other comprehensive loss	(8)	(8)	(8)
Accumulated deficit	(77,183)	(77,183)	(77,183)
Total stockholders' (deficit) equity	(67,763)	156,394	314,244
Total capitalization	$ 156,394	$ 156,394	$ 314,244

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash, cash equivalents, and marketable securities, total stockholders' equity (deficit) and total capitalization by $10.2 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash, cash equivalents, and marketable securities, total stockholders' equity (deficit) and total capitalization by $14.9 million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full, our pro forma as adjusted cash, cash equivalents, and marketable securities, additional paid-in capital, total stockholders' equity (deficit), total capitalization, and shares of our common stock outstanding as of June 30, 2024 would be $338.0 million, $415.8 million, $338.7 million, $338.7 million, and 38,580,919 shares, respectively.

The number of shares of our common stock issued and outstanding, pro forma and pro forma as adjusted, in the table above is based on 3,163,020 shares (which includes 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture) of our common stock outstanding as of June 30, 2024, and assumes the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering, and excludes:

- 1,796,272 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under the 2021 Plan, with a weighted-average exercise price of $2.68 per share;
- 1,228,574 shares of our common stock issuable upon the exercise of stock options granted after June 30, 2024 pursuant to the 2021 Plan, with a weighted-average exercise price of $6.81 per share;
- 3,690,000 shares of our common stock that will become available for future issuance under the 2024 Plan, which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2024 Plan and any shares underlying outstanding stock awards granted under the 2021 Plan that expire or are repurchased, forfeited, cancelled, or withheld; and
- 369,402 shares of our common stock reserved for future issuance under the ESPP, which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book deficit as of June 30, 2024 was $68.2 million, or $21.55 per share of our common stock. Our historical net tangible book deficit per share is the amount of our total tangible assets less our total liabilities and the carrying values of our convertible preferred stock, which is not included within stockholders' deficit. Our historical net tangible book deficit per share represents historical net tangible book deficit divided by the 3,163,020 shares (which includes 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture) of our common stock outstanding as of June 30, 2024.

Our pro forma net tangible book value as of June 30, 2024 was $156.0 million, or $6.00 per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of June 30, 2024, after giving effect to the pro forma adjustment described above.

After giving further effect to the issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2024 would have been $313.8 million, or $8.50 per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value per share of $2.50 to our existing stockholders and immediate dilution of $7.50 in pro forma as adjusted net tangible book value per share to new investors purchasing shares of our common stock in this offering.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis (without giving effect to any exercise by the underwriters of their option to purchase additional shares):

Assumed initial public offering price per share		$16.00
Historical net tangible book deficit per share as of June 30, 2024	($21.55)	
Pro forma increase in historical net tangible book value per share as of June 30, 2024 attributable to the pro forma adjustments described above	27.55	
Pro forma net tangible book value per share as of June 30, 2024	6.00	
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	2.50	
Pro forma as adjusted net tangible book value per share after this offering		8.50
Dilution per share to new investors participating in this offering		$ 7.50

The dilution information discussed above is illustrative only and may change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price

range set forth on the cover page of this prospectus, would increase or decrease, as applicable, our pro forma as adjusted net tangible book value per share after this offering by $0.28, and dilution per share to new investors purchasing shares of our common stock in this offering by $0.72, assuming that the number of shares of our common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase our pro forma as adjusted net tangible book value per share after this offering by $0.17 and decrease dilution per share to new investors purchasing shares of our common stock in this offering by $0.17, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each decrease of 1.0 million shares in the number of shares of our common stock offered by us, as set forth on the cover page of this prospectus, would decrease our pro forma as adjusted net tangible book value per share after this offering by $0.18 and increase dilution per share to new investors purchasing shares of our common stock in this offering by $0.18, assuming no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise in full their option to purchase additional shares, our pro forma as adjusted net tangible book value per share after this offering would be $8.77, representing an immediate increase in pro forma as adjusted net tangible book value per share of $0.27 to existing stockholders and immediate dilution in pro forma as adjusted net tangible book value per share of $7.23 to new investors purchasing common stock in this offering, based on the assumed initial public offering price of $16.00 per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table as of June 30, 2024 summarizes on the pro forma as adjusted basis described above, the total number of shares of our common stock purchased from us on an as converted to common stock basis, the total consideration paid or to be paid, and the average price per share paid or to be paid by existing stockholders and by new investors in this offering at an assumed initial public offering price of $16.00 per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing shares of our common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Weighted-Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders before this offering	26,002,794	70%	$225,000,000	56%	$ 8.65
Investors participating in this offering	10,937,500	30%	175,000,000	44%	16.00
Total	36,940,294	100%	$400,000,000	100%	$ 10.83

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to 67% of the total number of shares of our common stock outstanding after this offering, and the number of shares of our common stock held by new investors purchasing common stock in this offering would be increased to 33% of the total number of shares of our common stock outstanding after this offering.

The foregoing tables and calculations (other than the historical net tangible book value calculations) are based on 3,163,020 shares (which includes 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture) of our common stock outstanding as of June 30, 2024, and assumes the

automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering, and excludes:

- 1,796,272 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2024 under the 2021 Plan, with a weighted-average exercise price of $2.68 per share;
- 1,228,574 shares of our common stock issuable upon the exercise of stock options granted after June 30, 2024 pursuant to the 2021 Plan, with a weighted-average exercise price of $6.81 per share;
- 3,690,000 shares of our common stock that will become available for future issuance under the 2024 Plan, which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2024 Plan and any shares underlying outstanding stock awards granted under the 2021 Plan that expire or are repurchased, forfeited, cancelled, or withheld; and
- 369,402 shares of our common stock reserved for future issuance under the ESPP, which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP.

To the extent that new stock options or other equity awards are issued or any outstanding stock options are exercised, or we issue additional shares of our common stock in the future, there will be further dilution to new investors. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

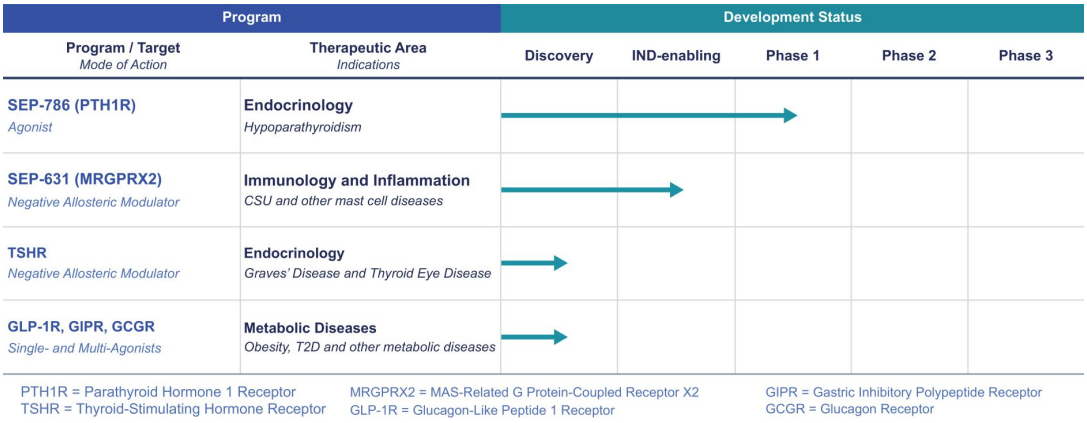
You should read the following discussion and analysis of our financial condition and results of operations together with our audited financial statements and unaudited interim condensed financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans, and expectations related to future events and our future financial performance that involve risks, uncertainties and assumptions, such as statements of our plans, objectives, expectations, intentions, forecasts and projections. Our actual results and the timing of selected events could differ materially from those discussed in these forward-looking statements as a result of several factors including, but not limited to, those set forth under the section titled "Risk Factors" and elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected for any period in the future, and you should carefully read the section titled "Risk Factors" to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biotechnology company pioneering a new era of GPCR oral small molecule drug discovery powered by our proprietary Native Complex Platform™. Our industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of our deep pipeline of product candidates focused initially on treating patients in three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases.

Our proprietary Native Complex Platform™ replicates the natural structure, function, and dynamics of GPCRs outside of cells at an industrial scale for, as we believe it, the first time. Our foundational technologies enable us to isolate, purify, and reconstitute full-length, properly folded GPCR proteins within ternary complexes with ligands and transducer proteins in a lipid bilayer that mimics the cell membrane. We then apply state-of-the- art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we conduct GPCR oral small molecule drug discovery using an industrialized and iterative structure-based drug design approach for a diverse collection of GPCR targets. Our Native Complex Platform™ is designed to enable us to target specific GPCRs, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies, including agonists (which activate GPCR signaling), antagonists (which inhibit GPCR signaling), and allosteric modulators (which either increase or decrease the degree of GPCR activation by endogenous ligands), to affect GPCR signaling in different ways to achieve desired therapeutic effects.

We are advancing a deep portfolio of oral small molecule GPCR-targeted programs with novel mechanistic approaches to treat diseases across multiple therapeutic areas for patients with significant unmet needs. Our wholly-owned pipeline is summarized in the figure below.



We are developing our lead product candidate, SEP-786, an oral small molecule agonist targeting the Parathyroid Hormone 1 Receptor (PTH1R) for the treatment of hypoparathyroidism. Leveraging our team, scientific and technical advisors, and our proprietary Native Complex Platform™, we aim to be a leader in the development of oral GPCR-targeted medicines for patients with significant unmet needs.

We were incorporated in Delaware in December 2019 under the name GPCR NewCo, Inc. In June 2021, we changed our name to Septerna, Inc. We are headquartered in South San Francisco, California.

We have incurred significant operating losses since our inception, except for the year ended December 31, 2023 when we recorded net income of $4.2 million. Our revenue to date has been generated solely from research services. Since our founding, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, developing our proprietary and structure-based drug discovery platform, identifying and discovering our product candidates, establishing our intellectual property portfolio, conducting research and preclinical studies, including IND-enabling studies, initiating and conducting clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and related raw materials, and providing general and administrative support for these operations. We have not had any products approved for sale and have not generated any revenue from product sales. Further, we do not expect to generate revenue from commercial product sales until such time, if ever, that we are able to successfully complete the development and obtain marketing approval for one or more of our product candidates. Our ability to generate product revenue will depend on the successful development and eventual commercialization of one or more of our product candidates.

We have incurred net losses in each year since inception, except for the year ended December 31, 2023. During the year ended December 31, 2023, we recorded a gain on sale of non-financial asset of $47.6 million for the sale of an in-progress research and development (IPR&D) asset related to a GPCR program and $0.2 million in revenue related to research services resulting in net income of $4.2 million for the year then-ended compared to net loss of $27.7 million for the year ended December 31, 2022. Of the $47.6 million gain on sale of non-financial asset, $25.0 million was received in cash in September 2023 and $22.6 million was received during the six months ended June 30, 2024. Our net losses were $19.8 million and $30.6 million for the six months ended June 30, 2023 and 2024, respectively. As of June 30, 2024, we had an accumulated deficit of $77.2 million. We expect to continue to incur net losses for the foreseeable future. Our net losses may fluctuate significantly from period to period, depending on the timing and expenditures of our operational activities.

We expect to continue to incur significant and increasing net operating losses for the next several years as we:

- continue to advance our product candidates through preclinical studies and into clinical trials;
- attract, hire and retain additional personnel;
- operate as a public company, including expenses related to compliance with the rules and regulations of the SEC and those of any national securities exchange on which our securities are traded, legal, auditing, additional insurance expenses, investor relations activities, and other administrative and professional services;
- continue our research and development efforts and expand our pipeline of product candidates;
- acquire, discover, validate, and develop additional product candidates;
- require the manufacture of supplies for our preclinical studies and clinical trials;
- obtain, maintain, expand, and protect our intellectual property portfolio;
- implement operational, financial and information management systems;
- make royalty, milestone or other payments under any future, license or collaboration agreements;
- potentially seek to identify, assess, acquire, or in-license or develop new technologies or additional product candidates;

- potentially experience any delays, challenges, or other issues associated with the clinical development of our product candidates, including with respect to our regulatory strategies;
- pursue regulatory approval of product candidates that successfully complete clinical trials; and
- establish a sales, marketing and distribution infrastructure to commercialize any product candidate for which we may obtain marketing approval and related commercial manufacturing build-out.

Our net losses may fluctuate significantly from period to period, depending upon the timing of our expenditures on research and development activities. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our accounts payable and accrued expenses and other current liabilities, which includes accrued research and development, in the statements of cash flows in our audited and interim unaudited condensed financial statements included elsewhere in this prospectus.

As a result, we will require substantial additional funding to further develop our product candidates and support our continuing operations. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect existing stockholders' rights as common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We have historically financed our operations primarily through the issuances of convertible promissory notes and convertible preferred stock. In November 2021, we entered into a total of $100.0 million of Series A convertible preferred stock financing which was divided into two tranches. The initial tranche was completed in November 2021 for net proceeds of $44.7 million, of which $30.0 million was received in cash, net of issuance costs, and $14.7 million was for the conversion of the then outstanding convertible promissory notes plus accrued interest. In November 2022, we executed the second tranche for net cash proceeds of $30.0 million. The Series A convertible preferred stock agreement was subsequently amended to cancel the remaining 25.0 million unissued shares of Series A convertible preferred stock in June 2023, upon entering into the Series B convertible preferred stock financing. In June 2023, we entered into a total of $150.0 million of Series B convertible preferred stock financing, which was divided into two tranches of equal amounts. The first tranche, which was the issuance of $75.0 million of Series B convertible preferred stock, was completed in June and July 2023 for total net proceeds of $74.5 million. The second tranche, which was for the issuance of the remaining $75.0 million, was completed in May 2024 for net proceeds of $74.9 million. Since our inception, we have devoted substantially all of our resources to raising capital, organizing and staffing our company, business and scientific planning, conducting discovery and research and development activities, establishing and protecting our intellectual property portfolio, developing and progressing our product candidates and preparing for clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and component materials, engaging in collaboration activities, and providing general and administrative support for these operations. Based on our current plans, we believe our existing cash, cash equivalents, and marketable securities, together with the net proceeds from this offering, will be sufficient to fund our operations and capital expenditure requirements into 2027. See the subsection titled "—Liquidity and Capital Resources" below.

We use contract research and development organizations to conduct our preclinical works and clinical trials. Additionally, we utilize third-party contract manufacturing organizations (CMOs), to manufacture and supply our

preclinical and clinical materials during the development of our product candidates. We expect to use similar contract resources for the commercialization of our products, at least until our resources and operations are at a scale that justifies investment in internal manufacturing capabilities.

Vertex Asset Purchase and Service Agreements

Asset Purchase Agreement

In September 2023, we entered into an asset purchase agreement with Vertex Pharmaceuticals Incorporated (Vertex) for a total of $47.6 million under which Vertex acquired all of our IPR&D asset related to a GPCR program, including all intellectual property, materials, and compounds associated with the program (Vertex purchase agreement). Of the $47.6 million, $25.0 million was received in cash in September 2023 and $22.6 million was received in the first half of 2024. Additionally, as part of the agreement, Vertex assumed all claims, counterclaims and credits associated with the program, and we gave up all rights to the intellectual property. The transfer of the IPR&D asset to Vertex was completed in November 2023.

At the same time in September 2023, we entered into a research service agreement with Vertex under which we agreed to perform certain exploratory research activities for Vertex. See the subsection titled "—Service Agreement" below.

The Vertex purchase agreement also provides for a potential milestone payment payable to us contingent upon achievement of a certain research milestone. The milestone payment amount is determined based on the timing of achievement of the research milestone. The variable consideration related to this milestone payment was determined to be improbable of receipt at this time. As a result, the milestone payment was excluded from the transaction price. After the potential milestone payment, we will not receive any other payments or future royalties related to this IPR&D asset.

Service Agreement

In addition to the Vertex purchase agreement, we also entered into a research service agreement with Vertex (Vertex service agreement) under which we agreed to perform certain exploratory research activities for Vertex. The Vertex service agreement is for a two-year term, however, Vertex has the ability to terminate the agreement with a 30-day notice at any time. As a result, we concluded that the contract duration is 30 days, representing a month-to-month service contract. We recognize revenue associated with the Vertex service agreement over the performance period of the research services as the services are provided.

Components of Results of Operations

Revenue

We have not generated any revenue from product sales and do not expect to do so in the foreseeable future. Our ability to generate product revenue, if ever, will depend on the successful development and eventual commercialization of any product candidates that we identify. If we fail to complete the development of any future product candidates in a timely manner or to obtain regulatory approval for such product candidates, our ability to generate future revenue and our results of operations and financial position would be materially adversely affected. Our revenues to date have been exclusively related to research services. We recognize revenue as specified research services are performed and the results of the research and development services are provided to the customer.

Operating Expenses

Our operating expenses consist of (i) research and development expenses and (ii) general and administrative expenses.

Research and Development

Research and development expenses account for the largest component of our total operating expenses. Research and development expenses consist primarily of direct and unallocated costs incurred for the research and development of our product candidates.

Our research and development expenses consist of:

- direct costs, including:
  - external research and development costs related to (i) the production of preclinical materials, including fees and milestones paid to contract manufacturers and (ii) agreements with contract development organizations, consultants and other third-party contract organizations to conduct our preclinical studies and other research and development activities on our behalf;
  - external costs to conduct clinical trials, including costs paid to clinical research organizations (CROs), the production of clinical materials and fees paid to contract manufacturers; and
  - costs incurred in connection with laboratory operations, materials and supplies, and other preclinical studies.
- unallocated costs, including:
  - employee-related costs, including salaries, benefits and stock-based compensation for employees engaged in research and development activities;
  - external research and development costs, including contract research and development and professional service fees for consulting and related services;
  - facility-related and office costs, including lease/rent, building-related expenses, facility-related overhead, and depreciation expense; and
  - other costs, including expenses related to our funded, sponsored research activities and technology licenses, laboratory operations, information technology (IT)-related expenses.

We expense all research and development costs in the periods in which they are incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and third-party service providers.

A significant portion of our research and development costs have been external costs, which we track by stage of development. However, we do not track our unallocated costs on a program specific basis because these costs are deployed across multiple projects and, as such, are not separately classified.

At this time, we cannot reasonably estimate or know the nature, timing, and estimated costs of the efforts that will be necessary to complete the development of, and obtain regulatory approval for, any of our product candidates. We expect that our research and development expenses will increase substantially in absolute dollars for the foreseeable future as we continue to invest in research and development activities related to developing our product candidates, as our product candidates advance into later stages of development, as we begin to conduct clinical trials, as we seek regulatory approvals for any product candidates that successfully complete clinical trials, and as we incur expenses associated with hiring additional personnel to support our research and development efforts. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, and the successful development of our product candidates is highly uncertain. This is due to the numerous risks and uncertainties associated with developing product candidates, many of which are outside of our control, including the uncertainty of:

- the timing and progress of preclinical and clinical development activities;
- the number and scope of preclinical and clinical programs we decide to pursue;

- our ability to maintain our current research and development programs and to establish new ones;
- establishing an appropriate safety profile with IND-enabling studies;
- the number of sites and patients included in the clinical trials;
- the countries in which the clinical trials are conducted;
- per patient trial costs;
- successful patient enrollment in, and the initiation of, clinical trials, as well as drop out or discontinuation rates;
- the successful completion of clinical trials with safety, tolerability and efficacy profiles that are satisfactory to the FDA, EMA, or any other comparable foreign regulatory authorities;
- the number of trials required for regulatory approval;
- the timing, receipt and terms of any regulatory approvals from applicable regulatory authorities;
- our ability to establish collaboration arrangements;
- the performance of any future collaborators;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- significant and changing government regulation and regulatory guidance;
- the impact of any business interruptions to our operations or to those of the third parties with whom we work;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- launching commercial sales of our product candidates, if approved, whether alone or in collaboration with others; and
- maintaining a continued acceptable safety profile of the product candidates following approval.

Any changes in the outcome of any of these variables could mean a significant change in the costs and timing associated with the development of our product candidates. For example, if the FDA, EMA or any other comparable foreign regulatory authority were to require us to conduct clinical trials beyond those that we anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in our clinical trials due to patient enrollment or other reasons, we would be required to expend significant additional financial resources and time on the completion of clinical development. We may never obtain regulatory approval for any of our product candidates.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, costs related to maintenance and filing of intellectual property, legal fees related to corporate matters, professional fees paid for accounting, auditing, consulting, tax and investor relations services, insurance costs, general corporate expenses, and IT-related and facility-related costs not otherwise included in research and development expenses. Personnel-related costs include salaries, benefits, and stock-based compensation for our personnel in executive, legal, finance and accounting, human resources, and other administrative functions.

We expect that our general and administrative expenses will increase substantially in absolute dollars for the foreseeable future as we continue to increase our headcount to support our business growth. We also anticipate that we will incur increased expenses as a result of our preparation of becoming and, ultimately, operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and expenses related to audit, legal, regulatory services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor relations costs.

Other Income (Expense), Net

Interest Income

Interest income consists of interest earned on our cash, cash equivalents, and marketable securities during the period.

Other Income (Expense), Net

Other income (expense), net consists primarily of changes in the fair value of our cash equivalents held in money market funds and loss on disposal of our fixed assets.

Provision for Income Taxes

We are subject to corporate United States federal and state income taxation. As of December 31, 2023, we had $14.6 million of federal NOL carryforwards and $28.9 million of state NOL carryforwards, available to reduce future taxable income. Of the federal NOL carryforwards, $14.6 million will carryforward indefinitely. The state NOL carryforwards will begin to expire in 2041, if not utilized.

Section 382 of the Code (Section 382) places a limitation, referred to as the Section 382 limitation, on the amount of taxable income that can be offset by NOL carryforwards after a change in control (generally greater than 50% change in ownership) of a loss corporation. California has similar rules. When an ownership change occurs, Section 382 limits the use of NOLs and credits in subsequent periods based on the annual 382 limitations. The annual 382 limitations may limit the full use of available tax attributes in one year but the identified ownership changes may not result in expiration of tax attributes for use prior to expiration of their respective carryforward periods. We establish a valuation allowance against all of our net deferred tax assets. We consider all available evidence, both positive and negative, including but not limited to our historical operating results, income or loss in recent periods, cumulative losses in recent years, forecasted earnings, future taxable income, and significant risk and uncertainty related to forecasts, and concluded the deferred tax assets are not more likely than not to be realized.

Additionally, we had federal and state research and development tax credits carryforwards of $2.0 million and $1.8 million, respectively, as of December 31, 2023 available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2041 if not utilized. The state research and development tax credits have no expiration date.

We record liabilities related to uncertain tax positions in accordance with the guidance that clarifies the accounting for uncertainty in income taxes recognized in an enterprise’s financial statements by prescribing a minimum recognition threshold and measurement attribute for purposes of financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. As of December 31, 2022 and 2023, we had unrecognized tax benefits of $1.8 million and $2.5 million, respectively, all of which would affect our income tax expense if recognized, before consideration of our valuation allowance.

Results of Operations

Six Months Ended June 30, 2023 and 2024

Our results of operations for each of the periods indicated are summarized in the table below (in thousands):

	Six Months Ended June 30,		
	2023	2024	Change
Revenue	$ —	$ 687	$ 687
Operating expenses:			
Research and development	16,372	28,188	11,816
General and administrative	3,830	6,054	2,224
Total operating expenses	20,202	34,242	14,040
Loss from operations	(20,202)	(33,555)	(13,353)
Other income, net:			
Interest income	435	2,809	2,374
Other expense, net	(2)	(63)	(61)
Total other income, net	433	2,746	2,313
Loss before benefit for income taxes	(19,769)	(30,809)	(11,040)
Benefit for income taxes	—	202	202
Net loss	$ (19,769)	$ (30,607)	$ (10,838)

Revenue

Our revenue of $0.7 million for the six months ended June 30, 2024 was generated from the services provided to Vertex while no revenue was recorded for the six months ended June 30, 2023.

Operating Expenses

Research and Development

The following table summarizes our research and development expenses for each of the periods indicated by direct and unallocated costs (in thousands):

	Six Months Ended June 30,		
	2023	2024	Change
Direct costs:			
SEP-786 (PTH1R)	$ 2,126	$ 4,746	$ 2,620
SEP-631 (MRGPRX2)	1,001	874	(127)
TSHR	1,114	794	(320)
Other programs	916	1,359	443
Unallocated costs:			
Employee-related costs	5,571	7,976	2,405
External research and development costs	1,378	6,459	5,081
Facility-related and office costs	1,518	2,435	917
Other costs	2,748	3,545	797
Total research and development expense	$ 16,372	$ 28,188	$ 11,816

Research and development expense was $16.4 million and $28.2 million for the six months ended June 30, 2023 and 2024, respectively. The increase was primarily due to (i) $2.6 million of higher direct costs mainly attributable to our preclinical programs, (ii) $2.4 million of higher employee-related costs as a result of increased

headcount, (iii) $5.1 million of higher expenses associated with external research and development costs, and (iv) $0.9 million of higher facility-related and office costs as we continue to expand our office space to accommodate higher occupancy and larger operational activities.

General and Administrative

General and administrative expenses were $3.8 million and $6.1 million for the six months ended June 30, 2023 and 2024, respectively. The increase was primarily due to (i) $0.8 million of higher employee-related costs as a result of increased headcount, (ii) $0.6 million of higher legal fees, (iii) $0.4 million of higher audit and accounting-related fees, and (iv) $0.2 million of higher facility-related and office costs as we continue to expand our office space to accommodate higher headcount, higher occupancy, and larger operational activities.

Other Income, Net

Interest Income

Interest income was $0.4 million and $2.8 million for the six months ended June 30, 2023 and 2024, respectively. The increase was due to higher interest rates and higher balances of invested cash in our cash equivalents, and marketable securities.

Other Expense, net

For the six months ended June 30, 2023 and 2024, our other expense, net was immaterial.

Benefit for Income Taxes

We recognized $0.2 million of benefit for income taxes for the six months ended June 30, 2024. We did not record any benefit or provision for income taxes for the six months ended June 30, 2023.

Comparison of the Years Ended December 31, 2022 and 2023

Our results of operations for each of the periods indicated are summarized in the table below (in thousands):

	Years Ended December 31,		
	2022	2023	Change
Revenue	$ —	$ 151	$ 151
Operating expenses (income):			
Research and development	22,044	35,979	13,935
General and administrative	5,923	9,722	3,799
Gain on sale of non-financial asset	—	(47,625)	(47,625)
Total operating expenses (income)	27,967	(1,924)	(29,891)
(Loss) income from operations	(27,967)	2,075	30,042
Other income, net:			
Interest income	291	2,786	2,495
Other income, net	—	10	10
Total other income, net	291	2,796	2,505
(Loss) income before provision for income taxes	(27,676)	4,871	32,547
Provision for income taxes	—	(691)	(691)
Net (loss) income	$ (27,676)	$ 4,180	$ 31,856

Revenue

Our revenue of $0.2 million for the year ended December 31, 2023 was generated from the services provided to Vertex while no revenue was recorded for the year ended December 31, 2022.

Operating Expenses (Income)

Research and Development

The following table summarizes our research and development expenses for the periods indicated by direct and unallocated costs (in thousands):

	Years Ended December 31,		
	2022	2023	Change
Direct costs:			
SEP-786 (PTH1R)	$ 1,333	$ 4,334	$ 3,001
SEP-631 (MRGPRX2)	620	1,981	1,361
TSHR	1,315	1,654	339
Other programs	2,540	1,824	(716)
Unallocated costs:			
Employee-related costs	8,071	12,490	4,419
External research and development costs	2,575	5,313	2,738
Facility-related and office costs	1,661	3,181	1,520
Other costs	3,929	5,202	1,273
Total research and development expense	$ 22,044	$ 35,979	$13,935

Research and development expense was $22.0 million and $36.0 million for the years ended December 31, 2022 and 2023, respectively. The increase was primarily due to (i) $4.0 million of higher direct costs attributable to our preclinical programs, (ii) $4.4 million of higher employee-related costs as a result of increased headcount, (iii) $2.7 million of higher expenses associated with external research and development costs, and (iv) $1.5 million of higher facility-related and office costs as we continue to expand our office space to accommodate higher occupancy and larger operational activities.

General and Administrative

General and administrative expenses were $5.9 million and $9.7 million for the years ended December 31, 2022 and 2023, respectively. The increase was primarily due to (i) $2.2 million of higher employee-related costs a result of increased headcount, (ii) $0.9 million of higher legal fees, and (iii) $0.8 million of higher consulting expenses.

Gain on Sale of Non-Financial Asset

Gain on sale of non-financial asset of $47.6 million was attributable to the sale of our IPR&D asset related to a GPCR program to Vertex during the year ended December 31, 2023. No gain on sale of non-financial asset was recorded during the year ended December 31, 2022.

Other Income, Net

Interest Income

Interest income was $0.3 million and $2.8 million for the years ended December 31, 2022 and 2023, respectively. The increase was due to higher interest rates and higher balances of our cash and cash equivalents.

Other Income, Net

For the year ended December 31, 2023, our other income and expense was immaterial. For the year ended December 31, 2022, we did not record other income or expense.

Provision for Income Taxes

Provision for income taxes of $0.7 million for the year ended December 31, 2023 was primarily due to the gain on sale of non-financial asset, which resulted in net income.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred significant operating losses for each year since our inception, except for the year ended December 31, 2023 when we recorded net income of $4.2 million. Our revenue to date has been generated solely from research services. Since our founding, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, developing our proprietary and structure-based drug discovery platform, identifying and discovering our product candidates, establishing our intellectual property portfolio, conducting research and preclinical studies, including IND-enabling studies, initiating and conducting clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and related raw materials, and providing general and administrative support for these operations. We have not had any products approved for sale and have not generated any revenue from product sales. Further, we do not expect to generate revenue from product sales until such time, if ever, that we are able to successfully complete the development and obtain marketing approval for one or more of our product candidates. Our ability to generate product revenue will depend on the successful development and eventual commercialization of one or more of our product candidates.

We have incurred net losses in each year since inception, except for the year ended December 31, 2023 when we recorded net income of $4.2 million. For the six months ended June 30, 2024, we incurred a net loss of $30.6 million. We expect to incur substantial expenses when we operate as a public company, advance our product candidates into clinical development, undergo the regulatory approval process, engage in other research and development activities to expand our pipeline of product candidates, expand our operations and headcount, maintain and expand our intellectual property portfolio and, if we obtain approval for one or more of our product candidates, launch commercial activities. Specifically, in the near term we expect to incur substantial expenses relating to initiating and completing our clinical trials and our other product development activities. Furthermore, upon the successful completion of this offering, we expect to incur incremental costs associated with operating as a public company, including significant legal, accounting, investor relations, director and officer insurance and other expenses. As of June 30, 2024, we had an accumulated deficit of $77.2 million. We expect to continue to incur net losses for the foreseeable future.

We have historically financed our operations primarily through the issuances of convertible promissory notes and convertible preferred stock. In November 2021, we entered into a total of $100.0 million of Series A convertible preferred stock financing which was divided into two tranches. The initial tranche was completed in November 2021 for net proceeds of $44.7 million, of which $30.0 million was received in cash, net of issuance costs, and $14.7 million was for the conversion of the then outstanding convertible promissory notes plus accrued interest. In November 2022, we executed the second tranche for net cash proceeds of $30.0 million. The Series A convertible preferred stock agreement was subsequently amended to cancel the remaining 25.0 million unissued shares of Series A convertible preferred stock in June 2023, upon entering into the Series B convertible preferred stock financing. In June 2023, we entered into a total of $150.0 million of Series B convertible preferred stock financing, which was divided into two tranches of equal amounts. The first tranche, which was the issuance of $75.0 million of Series B convertible preferred stock, was completed in June and July 2023 for total net proceeds of $74.5 million. The second tranche, which was for the issuance of the remaining $75.0 million, was completed

in May 2024 for net proceeds of $74.9 million. During the year ended December 31, 2023, we recorded a gain on sale of non-financial asset of $47.6 million for the sale of an IPR&D asset related to a GPCR program and $0.2 million in revenue related to research services resulting in net income of $4.2 million for the year then-ended compared to net loss of $27.7 million for the year ended December 31, 2022. Of the $47.6 million gain on sale of non-financial asset, $25.0 million was received in cash at the closing of the Vertex purchase agreement in September 2023 and $22.6 million was received during the six months ended June 30, 2024. As of June 30, 2024, we had $155.7 million in cash, cash equivalents, and marketable securities.

Cash Flows

The following table summarizes our cash flows for each of the periods indicated (in thousands):

	Years Ended December 31,		Six Months Ended June 30,	
	2022	2023	2023	2024
Net cash used in operating activities	$(23,303)	$(38,723)	$(19,992)	$(29,698)
Net cash (used in) provided by investing activities	(1,289)	22,122	(1,244)	(2,565)
Net cash provided by financing activities	30,051	74,520	71,463	74,952
Net increase in cash, cash equivalents and restricted cash	$ 5,459	$ 57,919	$ 50,227	$ 42,689

Net Cash Used in Operating Activities

Net cash used in operating activities was $20.0 million and $29.7 million for the six months ended June 30, 2023 and 2024, respectively. The net cash used in operating activities for the six months ended June 30, 2023 was attributable to our net loss of $19.8 million, and $1.6 million of net change in operating assets and liabilities, partially offset by $1.4 million of non-cash charges for depreciation and amortization, stock-based compensation and non-cash operating lease expense. The net cash used in operating activities for the six months ended June 30, 2024 was attributable to our net loss of $30.6 million, and $1.0 million of net change in operating assets and liabilities, partially offset by $1.9 million of non-cash charges for depreciation and amortization, stock-based compensation, non-cash operating lease expense, deferred income tax and accretion of discounts on available-for-sale marketable securities.

Net cash used in operating activities was $23.3 million and $38.7 million for the years ended December 31, 2022 and 2023, respectively. The net cash used in operating activities for the year ended December 31, 2022 was attributable to our net loss of $27.7 million, partially offset by $2.6 million of non-cash charges for depreciation and amortization, stock-based compensation and non-cash operating lease expense, and $1.7 million of net change in operating assets and liabilities. The net cash used in operating activities for the year ended December 31, 2023 was attributable to $47.6 million of non-cash adjustment related to gain on sale of non-financial asset, partially offset by (i) our net income of $4.2 million, (ii) $3.8 million of non-cash charges for depreciation and amortization, stock-based compensation, non-cash operating lease expense and deferred income tax, and (iii) $0.9 million of net change in operating assets and liabilities.

Net Cash (Used in) Provided by Investing Activities

Net cash used in investing activities of $1.2 million for the six months ended June 30, 2023 was attributable to purchases of property and equipment.

Net cash used in investing activities of $2.6 million for the six months ended June 30, 2024 was attributable to $32.2 million of purchases of available-for-sale marketable securities and $0.9 million of purchases of property and equipment, partially offset by the receipt of the remaining $22.6 million from the sale of non-financial asset in 2023 and the maturity of $7.9 million of available-for-sale marketable securities.

Net cash used in investing activities of $1.3 million for the year ended December 31, 2022 was attributable to purchases of property and equipment.

Net cash provided by investing activities of $22.1 million for the year ended December 31, 2023 was attributable to $25.0 million proceeds from the sale of non-financial asset, partially offset by $2.9 million of purchases of property and equipment.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $71.5 million and $75.0 million for the six months ended June 30, 2023 and 2024, respectively. Net cash provided by financing activities for the six months ended June 30, 2023 and 2024 was primarily attributable to net proceeds from the sale and issuance of our Series B convertible preferred stock.

Net cash provided by financing activities was $30.1 million and $74.5 million for the years ended December 31, 2022 and 2023, respectively. Net cash provided by financing activities for the year ended December 31, 2022 was primarily attributable to net proceeds from the sale and issuance of our Series A convertible preferred stock. Net cash provided by financing activities for the year ended December 31, 2023 was primarily attributable to net proceeds from the sale and issuance of our Series B convertible preferred stock.

Future Funding Requirements

Our primary use of cash is to fund our operations, primarily research and development expenditures. Cash used for operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses and prepaid expenses.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, timing, progress and results of discovery, preclinical development, laboratory testing and clinical trials for our product candidates;
- the expenses of manufacturing our product candidates for clinical trials and in preparation for marketing approval and commercialization;
- the extent to which we enter into collaborations or other arrangements with additional third parties in order to further develop our product candidates;
- the expenses of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the expenses and fees associated with the discovery, acquisition or in-license of additional product candidates or technologies;
- our ability to establish additional collaborations on favorable terms, if at all;
- the expenses required to scale up our clinical, regulatory and manufacturing capabilities;
- the expenses of future commercialization activities, if any, including establishing sales, marketing, manufacturing and distribution capabilities, for any of our product candidates for which we receive marketing approval; and
- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval.

We will need additional funds to meet operational needs and capital requirements for clinical trials, other research and development expenditures, and business development activities. Because of the numerous risks and

uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical studies.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect existing stockholders' rights as common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We have historically financed our operations primarily through the issuances of convertible promissory notes and convertible preferred stock. In June 2023, we entered into a total of $150.0 million of Series B convertible preferred stock financing, which was divided into two tranches of equal amounts. The first tranche, which was the issuance of $75.0 million of Series B convertible preferred stock, was completed in June and July 2023 for total net proceeds of $74.5 million. The second tranche, which was the issuance of the remaining $75.0 million, was completed in May 2024 for net proceeds of $74.9 million. Since our inception, we have devoted substantially all of our resources to raising capital, organizing and staffing our company, business and scientific planning, conducting discovery and research and development activities, establishing, maintaining, and protecting our intellectual property portfolio, developing and progressing our product candidates and preparing for clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and component materials, engaging in collaboration activities, and providing general and administrative support for these operations.

Based on our current plans, we believe our existing cash, cash equivalents, and marketable securities, together with the net proceeds from this offering, will be sufficient to fund our operations and capital expenditure requirements into 2027.

Contractual Obligations and Other Commitments

The following table summarizes our future cash outflows for contractual obligations as of June 30, 2024 (in thousands):

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating lease obligations, including interest	$38,421	$ 2,976	$ 9,226	$ 9,827	$ 16,392

We lease certain office space in South San Francisco under a lease that expires in July 2032. See Note 6 to our audited financial statements included elsewhere in this prospectus for more information on our lease obligations.

We enter into contracts in the normal course of business for contract research services, contract manufacturing services, professional services and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and, therefore, are cancelable contracts and not included in the table above.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements other than our indemnification agreements as described in Note 7 to our audited financial statements included elsewhere in this prospectus.

Critical Accounting Estimates, Significant Judgments and Use of Estimates

Management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States (U.S. GAAP). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Revenue Recognition

We generated revenue for the six months ended June 30, 2024 and the year ended December 31, 2023 from service revenue for research activities performed related to an agreement with Vertex. We consider revenue to be earned when all of the following criteria are met: (i) we have a contract with a customer that creates enforceable rights and obligations; (ii) promised products or services are identified; (iii) the transaction price, or the amount we expect to receive, including an estimate of uncertain amounts subject to a constraint to ensure revenue is not recognized in an amount that would result in a significant reversal upon resolution of the uncertainty, is determinable; (iv) and we have transferred control of the promised items to the customer. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in the contract. The transaction price for the contract is measured as the amount of consideration we expect to receive in exchange for the goods and services expected to be transferred. When a contract contains variable consideration and the variable consideration is constrained to the extent that it is not probable that it will be received, it is excluded from the transaction price. A contract's transaction price is allocated to each distinct performance obligation on a relative standalone selling price basis and recognized as revenue when, or as, control of the distinct good or service is transferred.

Stock-Based Compensation

Stock-based compensation is measured based on the estimated grant date fair value of the award and is recognized as expense on a straight-line basis over the requisite service period (usually the vesting period). Forfeitures are accounted for in the period in which they occur.

In determining the fair value of the options granted, we use the Black Scholes option pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Fair Value of Common Stock — See the subsection titled "—Fair Value of Common Stock" below.

Expected Term — The expected term represents the period that our stock options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term). We have very limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for our stock option grants. We will continue to apply this process until a sufficient amount of historical information regarding employee exercise patterns and post-vesting employment termination behavior becomes available.

Expected Volatility — Since we are not a public company and have no trading history for our common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period, where available, equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, life cycle stage and area of specialty.

Risk-free Interest Rate — The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the options.

Expected Dividend — We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

We recorded stock-based compensation of $0.7 million and $1.2 million for the six months ended June 30, 2023 and 2024, respectively. We recorded stock-based compensation of $1.5 million and $1.6 million for the years ended December 31, 2022 and 2023, respectively. As of June 30, 2024, total unrecognized stock-based compensation expense related to unvested restricted stock awards and unvested stock options was $5.9 million, which is expected to be recognized over a weighted-average period of 2.8 years. As of June 30, 2024, total unrecognized stock-based compensation expense related to unvested restricted stock awards subject to performance conditions, which were improbable of achievement, was $0.3 million.

The intrinsic value of all outstanding incentive awards as of June 30, 2024 was $34.4 million based on the assumed initial public offering price of $16.00 per share (the midpoint of the estimated price range set forth on the cover page of this prospectus), of which $3.4 million was related to vested stock options and $31.0 million was related to unvested stock options and restricted stock.

Fair Value of Common Stock

Historically, for all periods prior to this offering, the grant-date fair market value of our common stock underlying stock options has been determined by our board of directors with assistance of unrelated third-party valuation specialists. Because there has been no public market for our common stock, our board of directors have exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair market value, which include important developments in our operations, the prices at which we sold shares of our convertible preferred stock, the rights, preferences and privileges of our convertible preferred stock relative to those of common stock, actual operating results, financial performance, external market conditions in the life sciences industry, general U.S. market conditions, equity market conditions of comparable public companies, and the lack of marketability of our common stock. Given the absence of a public trading market for our common stock, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including: our stage of development and material risks related to our business; the progress of our research and development programs; sales of our preferred stock; the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock; the lack of marketability of our securities; our financial condition and operating results, including our levels of available capital resources; the likelihood of achieving a liquidity event such as an initial public offering in light of prevailing market conditions; equity market conditions affecting comparable public companies; the trends, developments and conditions in the life sciences and biotechnology industry sectors; and general U.S. market and economic conditions. Valuations of our common stock were prepared by an unrelated third-party valuation firm in accordance with the guidance provided by the American Institute of Certified Public Accountants 2013 Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, referred to as the "Practice Aid."

In accordance with the Practice Aid, prior to April 2024, the fair value of our common stock was determined using the Option Pricing Method (OPM) method as we determined the OPM method was the most appropriate method to utilize based on our stage of development and other relevant factors. The OPM uses the preferred stockholders' liquidation preferences, participation rights, dividend policy, and conversion rights to determine

how proceeds from a liquidity event shall be distributed among the various ownership classes at a future date. Starting April 2024, in accordance with the Practice Aid, we determined the hybrid probability-weighted expected return method (PWERM) method was the most appropriate method for determining the fair value of our common stock based on our stage of development and other relevant factors. The hybrid PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for our company, assuming various outcomes with one of those outcomes incorporating the OPM method.

After the equity value was determined and allocated to the various classes of equity securities, a discount for lack of marketability (DLOM) was applied to arrive at the fair value of common stock on a non-marketable basis.

A DLOM is applied based on the theory that as an owner of a private company stock, the holder has limited information and opportunities to sell the stock. A market participant that would purchase this stock would recognize this risk and thereby require a higher rate of return, which would reduce the overall fair market value.

The assumptions underlying these valuations represented management's best estimates, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different.

Once a public trading market for our common stock has been established in connection with the completion of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for granted stock options and other such awards we may grant, as the fair value of our common stock will be determined based on the quoted market price of our common stock.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development expenses consist primarily of employee-related costs, including salaries, benefits, and stock-based compensation for employees engaged in research and development activities, costs related to research activities, preclinical studies, production of preclinical materials, IT-related costs, allocated overhead costs including facility-related expenses, contract manufacturing, consulting fees, costs related to laboratory operations, and fees paid to other entities that conduct certain research and development activities on our behalf. Payments made prior to the receipt of goods and services to be used in research and development are deferred and recognized as expense in the period in which the related goods are received or services are rendered.

We have entered into various agreements with outsourced contract manufacturing and development vendors. We estimate accrued research and development expenses as of each balance sheet date based on facts and circumstances known at that time. We periodically confirm the accuracy of our estimates with internal management personnel and external service providers, and makes adjustments, if necessary. Research and development accruals are estimated based on the level of services performed, progress of the studies, including the phase or completion of events, and contracted costs. The estimated costs of research and development services provided, but not yet invoiced, are included in accrued expenses on the balance sheets. If the actual timing of the performance of services or the level of effort varies from the original estimates, we will adjust the accrual accordingly. Payments made under these arrangements in advance of the performance of the related services are recorded as prepaid expenses and other current assets until the services are rendered.

Recent Accounting Pronouncements

See Note 2 to our audited financial statements included elsewhere in this prospectus for more information.

Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. The primary objective of our investment activities is to preserve capital to fund our operations.

We also seek to maximize income from our marketable securities without assuming significant risk. To achieve our objectives, we maintain a portfolio of marketable securities in a variety of securities of high credit quality and short-term duration, invested in compliance with our policy.

We had cash and cash equivalents of $88.5 million and $131.2 million as of December 31, 2023 and June 30, 2024, respectively. Our cash equivalents as of December 31, 2023 consisted of money market funds, while as of June 30, 2024, our cash equivalents consisted of money market funds and available-for-sale marketable securities with maturity dates of 90 days or less. As of June 30, 2024, we had marketable securities of $24.5 million, which consisted of U.S. treasury securities, U.S. government agency securities and corporate debt securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant for us. Due to the nature of these cash equivalents and available-for-sale marketable securities, we believe that a hypothetical 100 basis point increase or decrease in interest rates during any of the periods presented would not have had a material effect on our financial statements included elsewhere in this prospectus.

Foreign Currency Exchange Risk

All of our employees and our operations are currently located in the United States and our expenses are generally denominated in U.S. dollars. However, we do use research and development vendors outside of the United States. As such, our expenses are denominated in both U.S. dollars and foreign currencies. Therefore, our operations are and will continue to be subject to fluctuations in foreign currency exchange rates. To date, foreign currency transaction gains and losses have not been material to our financial statements. We believe that a hypothetical 100 basis point increase or decrease in exchange rates during any of the periods presented would not have had a material effect on our financial statements included elsewhere in this prospectus.

Effects of Inflation

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We believe that inflation has not had a material effect on our financial statements included elsewhere in this prospectus.

Emerging Growth Company Status and Smaller Reporting Company Status

We qualify as “emerging growth company” under the JOBS Act, which permits us to take advantage of an extended transition period to comply with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of accounting standards that have different effective dates for public and private companies until those standards would otherwise apply to private companies. We have elected to use this extended transition period under the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates. We could be an emerging growth company until the earliest to occur: (i) the last day of the fiscal year in which we have more than $1.235 billion in annual gross revenue; (ii) the date we qualify as a “large accelerated filers” as defined in Rule 12b-2 under the Exchange Act, with at least $700.0 million of equity securities held by non-affiliates; (iii) the issuance, in any three-year period, by us of more than $1.0 billion in non-convertible debt securities; or (iv) the last day of the fiscal year ending after the fifth anniversary of this offering. Even after we no longer qualify as an emerging growth company, we may continue to qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements including reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements, if either (i) the market value of our stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

BUSINESS

Overview

We are a clinical-stage biotechnology company pioneering a new era of G protein-coupled receptor (GPCR) oral small molecule drug discovery powered by our proprietary Native Complex Platform™. Our industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of our deep pipeline of product candidates focused initially on treating patients in three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases.

GPCRs are the largest and most diverse family of cell membrane receptors and regulate physiological processes in nearly every organ system of the human body. Due to their significant role in human diseases, GPCRs have been the most productive target class in drug discovery history, accounting for approximately one-third of all U.S. Food and Drug Administration (FDA) approved drugs, representing approximately 500 products with combined global revenue of approximately $125 billion in 2023. Despite the pharmacological and commercial success of GPCR-targeted agents, about 75% of potential GPCR therapeutic targets remain undrugged and, for certain validated GPCRs, novel binding pockets may exist that could offer enhanced therapeutic benefits. Each step in GPCR activation involves subtle conformational changes that have been historically challenging to reproduce outside of a cell. The inability to isolate GPCR proteins in their native functional form outside of a cellular context has prevented scientists from leveraging some of the state-of-the-art technologies that have revolutionized drug discovery in other major target classes over the past decade. This complex challenge has limited GPCR drug discovery, particularly the development of novel oral small molecules, such as agonists for peptide GPCRs and allosteric modulators.

Our proprietary Native Complex Platform™ replicates the natural structure, function, and dynamics of GPCRs outside of cells at an industrial scale for, as we believe it, the first time. Our foundational technologies enable us to isolate, purify, and reconstitute full-length, properly folded GPCR proteins within ternary complexes with ligands and transducer proteins in a lipid bilayer that mimics the cell membrane. We then apply state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we conduct GPCR oral small molecule drug discovery using an industrialized and iterative structure-based drug design approach for a diverse collection of GPCR targets. Our Native Complex Platform™ is designed to enable us to target specific GPCRs, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies, including agonists (which activate GPCR signaling), antagonists (which inhibit GPCR signaling), and allosteric modulators (which either increase or decrease the degree of GPCR activation by endogenous ligands), to affect GPCR signaling in different ways to achieve desired therapeutic effects.

We are advancing a deep portfolio of oral small molecule GPCR-targeted programs with novel mechanistic approaches to treat diseases across multiple therapeutic areas for patients with significant unmet needs. Our wholly-owned pipeline, summarized in the figure below, is focused initially on three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases. We intend to evaluate opportunities in other major therapeutic areas, such as neurology, women's health, cardiovascular, and respiratory disease.

Program / Target *Mode of Action*	**Therapeutic Area** *Indications / U.S. Patient Population*	**Development Stage**	**Key Program Attributes**
SEP-786 (PTH1R) *Agonist*	**Endocrinology** *Hypoparathyroidism: ~70k*	Phase 1	• No approved or clinical-stage oral small molecules targeting PTH1R • Convenient oral dosing targets all hypoparathyroidism patients • Maintained serum calcium control over 28-day dosing in preclinical hypoparathyroidism model
SEP-631 (MRGPRX2) *Negative Allosteric Modulator*	**Immunology and Inflammation** *CSU: ~1.5mm* *Other Mast Cell Diseases*	IND-enabling	• Lead oral small molecule candidate targets novel binding site to selectively inhibit mast cells • Blocked mediator-induced angioedema in preclinical MRGPRX2 model • Pipeline-in-a-product potential treating mast cell driven diseases
TSHR *Negative Allosteric Modulator*	**Endocrinology** *Graves' Disease: ~2mm* *Thyroid Eye Disease: ~1mm*	Discovery	• Opportunity for novel oral small molecule disease-modifying agent • Reversed hyperthyroidism and eye proptosis in preclinical Graves' disease model
GLP-1R, GIPR, GCGR *Single- and Multi-Agonists*	**Metabolic Diseases** *Obesity and T2D: ~800mm*[1]	Discovery	• Potential to develop novel oral small molecule mono-, dual- and triple-receptor agonists • Demonstrated significant glucose reduction in preclinical oral-glucose tolerance test • Small molecule approach enables scalable manufacturing

Note: [1] Global population for obesity and T2D PTH1R = Parathyroid Hormone 1 Receptor MRGPRX2 = MAS-Related G Protein-Coupled Receptor X2
TSHR = Thyroid-Stimulating Hormone Receptor GLP-1R = Glucagon-Like Peptide 1 Receptor GIPR = Gastric Inhibitory Polypeptide Receptor GCGR = Glucagon Receptor

We are developing our lead product candidate, SEP-786, an oral small molecule agonist targeting the Parathyroid Hormone 1 Receptor (PTH1R) for the treatment of hypoparathyroidism. While there are peptide products approved and in development for hypoparathyroidism that target PTH1R, to our knowledge, SEP-786 is the only clinical-stage oral small molecule PTH1R agonist today. We have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, pharmacokinetics (PK) and pharmacodynamics (PD) of SEP-786, and expect to report data from this trial in mid-2025.

Leveraging our team, scientific and technical advisors, and our proprietary Native Complex Platform™, we aim to be a leader in the development of oral GPCR-targeted medicines for patients with significant unmet needs.

GPCRs as Therapeutic Targets

GPCRs are the most targeted drug class due to their significant role in human diseases and their pharmacological tractability. GPCRs are characterized by their seven transmembrane domains, and function in ternary complexes that form with extracellular ligands and intracellular transducer proteins which modulate cellular signaling pathways in response to ligand binding. Different GPCRs play vital roles in a variety of physiologic processes of every major organ system including the central nervous system (CNS), cardiovascular, respiratory, metabolic and urogenital systems, making them key therapeutic targets. Today, many GPCR-targeted drugs have established market-leading positions across a variety of therapeutic areas, including Ozempic and Wegovy (each marketed by Novo Nordisk) for the treatment of type 2 diabetes (T2D), and obesity, respectively, and Nurtec ODT (marketed by Pfizer) for the acute treatment of migraine.

Historically, GPCR oral small molecule drug discovery has been highly concentrated on a small number of targets – despite GPCRs constituting the largest human membrane protein family – as GPCRs are difficult to isolate in their native functional form outside of a cellular context, which has limited the utilization of modern drug discovery tools and technologies. As a result, about 75% of GPCR therapeutic targets remain undrugged and, for certain validated GPCRs, novel binding pockets may exist that could offer enhanced therapeutic benefits.

Our Native Complex Platform™ Aims to Unlock the Full Therapeutic Potential of GPCRs

In the past decade, drug discovery across various target classes has been revolutionized by a variety of state-of-the-art tools and technologies. These innovations include structure-based drug design, computational docking, and DNA-encoded libraries (DELs). However, the utilization of these technologies has been limited for discovering oral small molecules targeting GPCRs due to the inability to isolate functional native GPCR proteins outside of a cellular context.

With our proprietary Native Complex Platform™, we can purify GPCRs outside of cells and reconstitute them into fully functional ternary complexes with transducer proteins (e.g., G proteins, beta-arrestins) and ligands (endogenous or synthetic), all housed within a well-defined lipid bilayer environment (Figure 1). These Native Complexes are full-length, properly folded GPCRs that retain their natural structure, function, and dynamics. We then apply state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we are advancing a new approach to GPCR drug discovery, designed to expand the landscape of druggable GPCR targets with novel oral small molecule medicines for patients.

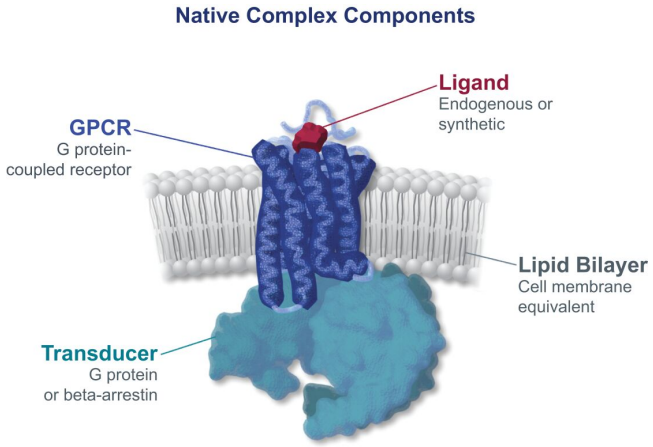


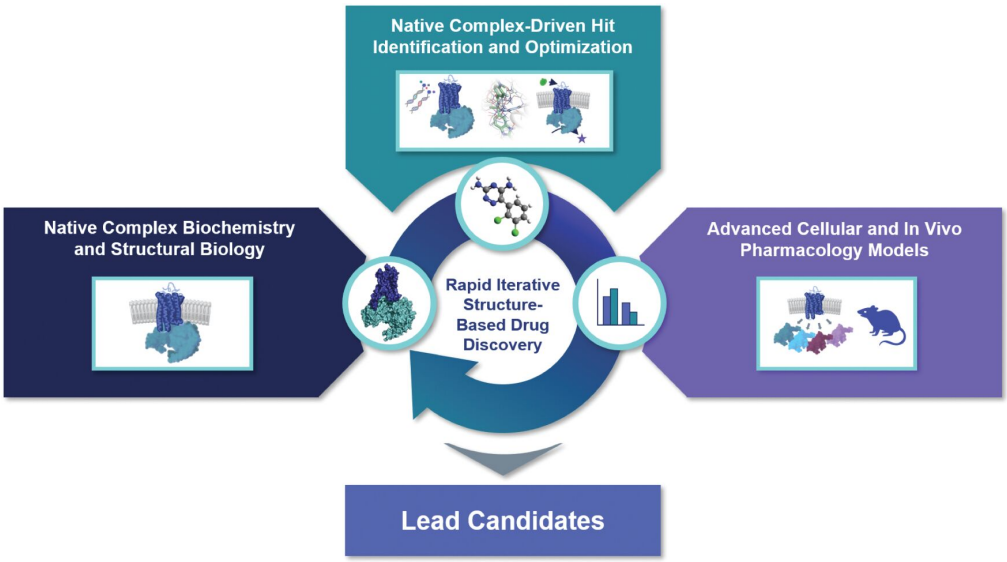
Figure 1. Native Complexes consist of full-length, properly folded GPCR proteins reconstituted with a ligand and/or a transducer protein such as a G protein in a lipid bilayer that mimics the cell membrane.

Our Native Complex Platform™ is powered by a suite of tools and technologies that we have optimized and integrated into a proprietary and industrialized workflow, and together form an efficient and iterative discovery process for identification and optimization of novel small molecule product candidates targeting high-value GPCRs, including:

- ***Native Complex biochemistry and structural biology:*** Our Native Complexes reconstitute native GPCR function in a purified biochemical format, which enables efficient high-resolution, three-dimensional structure determination using cryogenic electron microscopy (cryo-EM). This can reveal receptor binding pockets that we can target with a range of pharmacologies (e.g., agonists, antagonists, and allosteric modulators) as well as novel insights into mechanisms for GPCR modulation.

- ***Native Complex-driven hit identification and optimization:*** We virtually screen our GPCR structures against ultra-large-scale computational databases containing billions of candidate molecules to identify the most promising small molecule compounds that bind in pockets on the GPCR structure. We use technologies, including DELs, to screen billions of candidate molecules simultaneously, and we have developed proprietary technologies to discover and optimize compounds with a variety of modes of action. In addition, we use our proprietary Native Complex biochemical screens in our hit identification and optimization processes.
- ***Advanced cellular and in vivo pharmacology models:*** We efficiently evaluate hits and lead compounds through the integration of advanced cellular and *in vivo* pharmacology models. Prioritized compounds with desired pharmacologies are then either advanced as potential drug candidates or fed back into the process for additional Native Complex-driven compound optimization.

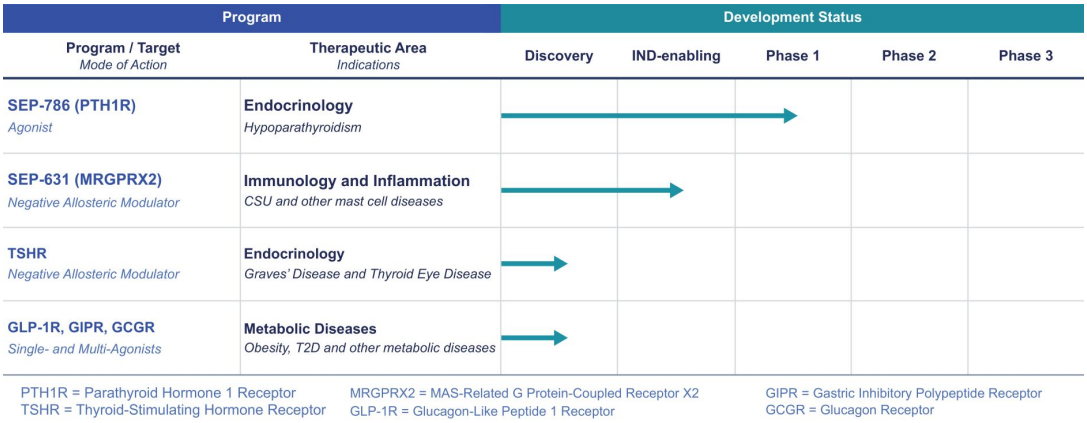
Our oral small molecule drug discovery process, powered by our proprietary Native Complex Platform™, is depicted in the figure below.



Our industrial-scale Native Complex Platform™ is designed to target certain GPCRs for the first time, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies to achieve desired therapeutic effects. Our platform has led to the discovery and development of a pipeline of novel, highly potent and selective oral small molecules, and for our most advanced programs, optimized them into clinical development candidates.

Our Pipeline and Programs

Our wholly-owned pipeline, summarized in the figure below, is focused initially on three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases. We intend to evaluate opportunities in other major therapeutic areas, such as neurology, women's health, cardiovascular, and respiratory disease.



SEP-786 – Oral Small Molecule PTH1R Agonist for Hypoparathyroidism

Hypoparathyroidism is a rare endocrine disease characterized by insufficient levels of parathyroid hormone (PTH) that affects approximately 70,000 patients in the United States and approximately 140,000 patients in Europe. Patients with hypoparathyroidism are at risk of both short-term and long-term complications, including muscle cramps, fatigue, cognitive dysfunction, and life-threatening complications, such as cardiac arrhythmias, seizures, and renal failure. The goal of treatment is to relieve symptoms and restore calcium and phosphate levels to normal. Current standard of care consists of high-dose calcium supplements and activated vitamin D (calcitriol); however, these therapies do not replace other functions of PTH to restore physiological mineral homeostasis or address all of the symptoms experienced by patients. Hormone replacement with injectable PTH peptides, either marketed or in clinical development, may improve blood chemistry profiles of patients via PTH1R activation but will require life-long daily injections. We believe there is a substantial opportunity for an oral small molecule therapy that offers convenience, improved compliance, and potentially superior efficacy.

Our lead product candidate, SEP-786, is a clinical-stage, oral small molecule agonist targeting PTH1R for the treatment of hypoparathyroidism. PTH1R is a historically difficult-to-drug small molecule target, yet we effectively leveraged our Native Complex Platform™ to discover and optimize SEP-786 with desired drug-like properties. In preclinical studies, SEP-786 has been observed to be generally well-tolerated and has demonstrated potent and selective activation of PTH1R in human, dog, and rat receptor *in vitro* models. In a preclinical animal model of hypoparathyroidism, SEP-786 controlled serum calcium levels within the normal range over a 28-day dosing period. We have successfully completed Investigational New Drug (IND)-enabling studies and have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, PK, and PD of SEP-786. We expect to report data from this trial in mid-2025.

SEP-631 – Oral Small Molecule MRGPRX2 NAM for CSU and Other Mast Cell Diseases

Chronic spontaneous urticaria (CSU) is a systemic inflammatory skin disease characterized by the spontaneous and persistent recurrence of itchy, painful hives, known as wheals, on the skin and angioedema, or swelling, that affects approximately 1.5 million patients in the United States. While there is no known trigger, the degranulation of mast cells and release of histamine and other inflammatory mediators lead to these debilitating symptoms. Patients

are treated initially with antihistamines and non-responders may be treated with Xolair (omalizumab), an injectable anti-IgE monoclonal antibody. The targeting and blocking of IgE-mediated inflammation can effectively address symptoms; however, only an estimated 36% of these antihistamine-refractory patients respond to anti-IgE therapy. Mas-related G-protein coupled receptor member X2 (MRGPRX2) plays an important role in mast cell activation and degranulation. We believe an oral therapy that inhibits MRGPRX2 could provide a differentiated treatment option for patients with CSU given the selective inhibition of mast cells and potential for combination therapy.

SEP-631 is a selective, oral small molecule MRGPRX2 negative allosteric modulator (NAM) that we are developing initially for the treatment of CSU. In preclinical studies, SEP-631 demonstrated potent and long-lasting inhibition of MRGPRX2 and blocked mediator-induced angioedema in mice engineered to express the human MRGPRX2 receptor. We have initiated IND-enabling studies of SEP-631 and upon completion, we anticipate submitting for regulatory clearance to initiate a clinical trial.

In addition to CSU, we may develop SEP-631 for the treatment of other mast cell diseases. MRGPRX2 is highly and uniquely expressed on mast cells that drive multiple prevalent diseases, including allergic asthma, atopic dermatitis, interstitial cystitis, migraine, and prurigo nodularis. We believe SEP-631 could offer a novel oral treatment option for these patient populations.

TSHR Program – Oral Small Molecule TSHR NAM for Graves' Disease and TED

Graves' disease is one of the most prevalent autoimmune conditions affecting over 2 million patients in the United States and is the leading cause of hyperthyroidism, resulting in symptoms including anxiety, irritability, tremor, and fatigue. Treatments have remained largely unchanged over the past 70 years, and include anti-thyroid medications, radioactive iodine therapy to ablate thyroid gland function, and thyroidectomy surgery. These treatment options may initially address the underlying symptoms, but they are not disease-modifying and do not stop disease progression to thyroid eye disease (TED) for approximately 50% of Graves' disease patients. TED is a serious, progressive and vision-threatening autoimmune condition that can lead to eye bulging, swelling, pain and blurred or double vision. Current treatments for TED, such as TEPEZZA (teprotumumab-trbw), an anti-IGF-1R human monoclonal antibody, are designed to help manage symptoms. Despite reaching global sales of $2.0 billion in 2022, TEPEZZA requires several intravenous (IV) infusions over several months and has risks of serious side effects, including hearing loss and metabolic issues, such as increased blood glucose or hyperglycemia.

These autoimmune conditions are caused by autoantibodies that bind to and activate the thyroid stimulating hormone receptor (TSHR) on thyroid cells in the thyroid gland (leading to Graves' disease) and other cells including orbital fibroblasts located behind the eyes (leading to TED). We believe an oral small molecule TSHR NAM could offer a novel disease-modifying treatment approach that directly addresses the pathobiology of both diseases by blocking TSHR overactivation caused by patients' autoantibodies.

In our preclinical studies, we have demonstrated that a TSHR NAM can reverse hyperthyroidism and proptosis in a novel mouse model of Graves' disease and inhibits multiple Graves' disease patient TSHR activating autoantibodies in cell-based assays using primary human cells. We are advancing several lead compounds towards selection of a development candidate for IND-enabling studies.

Incretin Programs – Oral Small Molecule Single- and Multi-Incretin Receptor Agonists for Metabolic Disorders Including Obesity and T2D

Obesity and diabetes are two of the most prevalent diseases in the world, affecting a combined total of more than 800 million people, and are associated with severe health complications, including cardiovascular disease and kidney failure, as well as an increased risk of death. Weight reduction is seen as an important treatment goal for patients with either condition. In recent years, several injectable peptide agonists targeting select metabolic hormone receptors, or incretin receptors, have been approved for the treatment of T2D and obesity.

Three incretins play significant roles in glucose metabolism and homeostasis: glucagon-like peptide-1 (GLP-1), gastric inhibitory polypeptide (GIP), and glucagon. Third-party clinical data with incretin-targeted therapeutics have demonstrated substantial and sustained reductions in body weight, as well as the ability to lower blood glucose and improve glycated hemoglobin (HbA1c). Global sales in 2023 for Ozempic and Wegovy (semaglutide, each marketed by Novo Nordisk), and Mounjaro and Zepbound (tirzepatide, each marketed by Eli Lilly and Company) were $18.4 billion and $5.3 billion, respectively. As a class, the marketed GLP-1 and GLP-1/GIP products generated $36 billion in global sales in 2023. Despite these advancements in the treatment of obesity and T2D, a number of key limitations remain for the incretin therapeutic class, including tolerability, prolonged titration schemes, injection administration, and supply challenges.

Based on unique chemical and structural insights obtained with our Native Complex Platform™, we believe we have an opportunity to discover and develop novel, next-generation, oral small molecules as selective single- or multi-acting GLP-1, GIP, glucagon receptor agonists. We are advancing several lead compounds towards selection of one or more development candidates for IND-enabling studies.

Our Team and Investors

We have built a strong values-driven organization, and are leveraging our industrial-scale Native Complax Platform™ to develop a broad and deep portfolio of GPCR-targeted programs for patients. We were founded by preeminent drug discovery company builders and scientific leaders in the biochemistry, structural biology, and pharmacology of GPCRs:

- **Robert Lefkowitz, M.D.,** James B. Duke Professor of Medicine and Professor of Biochemistry and Chemistry at Duke University and an Investigator of the Howard Hughes Medical Institute. Dr. Lefkowitz is globally recognized for his groundbreaking discoveries that reveal the inner workings of GPCRs, for which he was awarded the 2012 Nobel Prize in Chemistry and elections to both the National Academy of Sciences and the National Academy of Medicine.
- **Arthur Christopoulos, Ph.D.,** Professor of Analytical Pharmacology, Dean of the Faculty of Pharmacy & Pharmaceutical Sciences, and Director of the Neuromedicines Discovery Centre at Monash University in Australia. Dr. Christopoulos is a world-leading expert in GPCR molecular pharmacology and responsible for several seminal discoveries of allosteric modulation of GPCRs, for which he has been elected to both the Australian Academy of Science and the Australian Academy of Health and Medical Sciences.
- **Patrick Sexton, Ph.D., D.Sc.,** Professor, Drug Discovery Biology at Monash University and Director of the ARC Centre for Cryo-electron Microscopy of Membrane Proteins. Dr. Sexton is an international leader in GPCR biochemistry, pharmacology, and structural biology and his team is at the forefront of using cryo-EM to elucidate the structure and dynamics of GPCRs.
- **Jeffrey Finer, M.D., Ph.D.**, our President and Chief Executive Officer. Dr. Finer has more than 35 years of research, clinical and business experience. He has focused his career on breakthrough innovations that have included moving several first-in-class drugs into clinical trials, developing novel technology platforms that integrate science and engineering, and new company creation. Dr. Finer has been a Venture Partner at Third Rock Ventures, LLC (Third Rock Ventures) since 2016, where prior to joining Septerna, he was involved in the founding and launching of multiple biotech companies, including Maze Therapeutics, Inc. and Ambys Medicines, Inc., serving as interim Chief Technology Officer at both. Previously, Dr. Finer spent several years in research and development leadership positions, including Vice President, Research Technology at Theravance Biopharma, Inc. (Theravance Biopharma), Vice President, Discovery at Five Prime Therapeutics, Inc., and Director, Drug Discovery Technologies at Cytokinetics, Inc.

In addition, we have established a team of experienced biotechnology leaders with deep expertise in company building, drug discovery, and clinical advancement of novel medicines. Our senior leadership team includes:

- **Elizabeth (Liz) Bhatt, M.S., M.B.A.**, our Chief Operating Officer, who has more than 30 years of strategy, deal-making and company-building experience across a range of biotech and pharmaceutical companies, including Applied Molecular Transport Inc., Achaogen, Inc., Gilead Sciences, Inc., Eli Lilly and Company, and Maxygen, Inc.
- **Jae B. Kim, M.D.**, our Chief Medical Officer, is a highly accomplished healthcare executive with extensive experience in advancing novel therapies across multiple therapeutic areas. Prior to joining us, Dr. Kim served as Chief Medical Officer at Design Therapeutics, where he led the clinical advancement of the company's pipeline of small molecule genomic medicines, and as Chief Medical Officer at Avidity Biosciences. Dr. Kim served as Clinical Research Head, Chair of the Clinical Trial Review Board and Vice President of Clinical Development at Alnylam Pharmaceuticals, where he oversaw the development of multiple clinical assets across inborn errors of metabolism, cardiology, neurology and infectious disease.
- **Samira Shaikhly**, our Chief People Officer, is a human resources leader with more than 25 years of experience enabling organizational effectiveness in high-growth companies across multiple human resource disciplines including a 15-year tenure at Gilead Sciences, Inc.
- **Ran Xiao, M.B.A., CFA**, our Interim Chief Financial Officer and Vice President of Finance and Business Operations, has more than 20 years of experience in corporate accounting, finance, and business operations in the biotech industry. Earlier in her career, Ms. Xiao held positions as Vice President of Finance and Corporate Controller at Ambys Medicines, as Corporate Controller at Corvus Pharmaceuticals, where she played a key role in the company's initial public offering, and served in roles of increasing responsibility at InterMune, where she was part of the team responsible for accounting operations, financial planning, system implementation and business acquisition.
- **Uwe Klein, Ph.D.**, our Senior Vice President, Biological Sciences, has deep expertise in GPCR biology and over 25 years of experience in small molecule drug discovery across a range of biotech and pharmaceutical companies, including MyoKardia, Inc. (acquired by Bristol-Myers Squibb (BMS)). Earlier in his career, Dr. Klein held positions as Vice President, Biology at Numerate, Inc. (acquired by Valo Health, Inc.) and as Senior Director, Molecular & Cellular Biology at Theravance Biopharma, where he led a team of biologists and two cross-functional project teams in the discovery of numerous development candidates and several clinical compounds across different therapeutic areas and target classes.
- **Daniel Long, D.Phil.**, our Senior Vice President, Drug Discovery, is a highly experienced drug hunter with a track record of leading high-performing teams that discover drug candidates and advance them through preclinical development to IND and into clinical trials. Dr. Long spent more 20 years at Theravance Biopharma, where he held numerous scientist positions, including as Vice President, Head of Medicinal Chemistry, Biology and Pharmacology.

Our board of directors is composed of accomplished leaders in the life sciences industry, including our board chairman, Jeffrey Tong, Ph.D., a Partner at Third Rock Ventures; Abraham Bassan, M.S., a Principal at Samsara BioCapital L.P. (Samsara); Bernard Coulie, M.D., Ph.D., M.B.A., President and Chief Executive Officer of Pliant Therapeutics, Inc.; Dr. Ezekowitz, an Advisory Partner at Third Rock Ventures; Shalini Sharp, M.B.A., a member of the boards of directors of BeiGene, Ltd., Neurocrine Biosciences, Inc. and Organon & Co. and former Chief Financial Officer and Executive Vice President at Ultragenyx Pharmaceuticals Inc.; Jake Simson, Ph.D., a Partner at RA Capital Management, L.P. (RA Capital) and member of the board of directors of Bicara Therapeutics Inc., and Dr. Finer, our Chief Executive Officer. Further, we have assembled a cross-functional scientific and drug discovery advisory board, comprised of seasoned drug hunters and leading academic scientists at the forefront of GPCR biology and pharmacology.

Since our inception, we have raised net proceeds of approximately $224.2 million in equity capital from a syndicate of premier life sciences investors. Potential investors should not consider investments made by our existing investors as a factor when making a decision to purchase shares in this offering since our existing investors likely have different risk tolerances and paid significantly less per share than the price at which the shares are being offered in this offering.

Our Strategy

Our goal is to develop life-changing GPCR-targeted medicines for patients with significant unmet medical needs. We plan to achieve this goal by pursuing the following strategies:

- **Efficiently advance our portfolio of GPCR-targeted programs, led by SEP-786.** Our lead product candidate, SEP-786, is, to our knowledge, the only clinical-stage, oral small molecule agonist of PTH1R for hypoparathyroidism. We have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, PK, and PD of SEP-786, and we expect to report data from this trial in mid-2025. Our second most advanced candidate, SEP-631, an oral small molecule MRGPRX2 NAM that we are developing initially for the treatment of CSU, is currently in IND-enabling studies. We believe SEP-631 represents a pipeline-in-a-product opportunity to treat multiple mast cell-driven diseases. We also plan to continue advancing our TSHR and incretin programs toward selection of development candidates.
- **Continue to expand our differentiated GPCR-targeted pipeline focused on indications with significant unmet needs.** We are leveraging our GPCR biology and pharmacology know-how and proprietary Native Complex Platform™ to address a diverse range of diseases. For each of our programs to date, we have advanced from initiation of medicinal chemistry to potent drug-like compounds with activity in animal models in less than one year. We are focused initially on developing our novel GPCR-targeted drug candidates in three therapeutic areas – endocrinology, immunology and inflammation, and metabolic diseases – and intend to expand into other therapeutic areas. We will continue to focus on indications with well understood biology, predictive biomarkers for early proof-of-concept, efficient clinical development pathways, and high unmet medical need.
- **Maximize the potential of our Native Complex Platform™ through continued innovation and investment.** Using our industrial-scale platform, we are pioneering a new era of GPCR drug discovery and development. We have thoughtfully integrated state-of-the-art, high-resolution structural biology with large-scale screening and functional testing to accelerate the discovery and optimization of high-quality lead compounds. In under three years, our platform has allowed us to determine more than 80 high-resolution, three-dimensional GPCR structures with bound small molecules spanning multiple pharmacological mechanisms, and we have screened over 10 billion compounds across our targets which led to the discovery of our existing portfolio of novel compounds. We plan to continually enhance our in-house capabilities, tools, and technologies to further leverage our platform and expand our competitive advantages.
- **Evaluate and selectively execute value-creating strategic partnerships.** We currently own full worldwide rights across our portfolio, and we intend to build out a commercial presence in select major markets. Our industrialized drug discovery platform has generated, and we believe will continue to generate, numerous novel GPCR-targeted product candidates, some of which we will independently develop and commercialize, and others that may benefit from a strategic partner's development and commercial expertise, infrastructure, and financial resources. For example, in September 2023, we entered into an asset purchase agreement with Vertex Pharmaceuticals Incorporated (Vertex), under which Vertex acquired an undisclosed discovery-stage GPCR program from us and will be solely responsible for continuing the associated research and development efforts. We intend to explore additional opportunities with partners that we believe will meaningfully enhance the overall potential of our programs and allow us to further leverage our Native Complex Platform™.

Pioneering Approach to Unlock the Full Therapeutic Potential of GPCRs

Using our industrial-scale Native Complex Platform™, we are advancing a new approach to GPCR drug discovery and development. We have developed technologies aimed at unlocking GPCRs that have been

historically difficult to drug with oral small molecules, which may allow us to access certain high value GPCRs within the approximately 75% of untapped GPCR therapeutic targets. Our GPCR Native Complex Platform™ is built upon world-class expertise and leverages proprietary tools and technologies designed to overcome the historical limitations of GPCR drug discovery, including the isolation, purification, and stabilization of GPCRs in their native forms. Our approach has led to the discovery and development of a deep portfolio of novel oral small molecule GPCR-targeted programs that we are advancing into clinical trials.

GPCRs as Therapeutic Targets

GPCRs regulate physiological processes in nearly every organ system of the human body and are the most targeted drug class due to their significant role in human diseases and their pharmacological tractability. Nearly one-third of all FDA-approved drugs in the United States, representing approximately 500 products, target GPCR-associated pathways. In fact, GPCR-related drugs comprise approximately 27% of global pharmaceutical sales and generated over $125 billion in 2023.

GPCRs are proteins that span the cell membrane seven times, and their primary function is to recognize extracellular substances, or ligands, and transmit signals across the cell membrane to the inside of the cell. Ligand binding induces conformational changes in GPCRs, forming complexes with signal transducers, including G proteins. These transducers interact with second messengers, modulating various cellular processes. Certain GPCR ligands are capable of activating multiple pathways through different transducers, leading to diverse physiological and pathological effects.

GPCRs constitute the largest and most diverse family of cell membrane receptors, with around 800 identified members. GPCRs are key therapeutic targets due to their vital roles in a variety of physiologic processes including immune regulation, nervous system transmission, mood and behavior regulation, sensory transmission, and maintaining cardiovascular and gastrointestinal homeostasis. Despite the pharmacological and commercial success of GPCR-targeted agents, a majority of GPCR therapeutic targets remain undrugged. Each step in GPCR activation involves subtle conformational changes that have been historically challenging to reproduce outside of a cell. The inability to isolate GPCR proteins in their native functional form outside of a cellular context has prevented scientists from leveraging some of the state-of-the-art technologies that have revolutionized drug discovery in other major target classes over the past decade. This complex challenge has limited GPCR drug discovery, particularly the development of novel oral small molecules, such as agonists for peptide GPCRs and allosteric modulators.

To date, drug discovery has been highly concentrated on a small number of GPCRs. More than 70% of current GPCR-related drugs target only six subfamilies of GPCRs. There are about 400 known non-olfactory GPCRs, each represented as a branch on the phylogenetic tree in Figure 2 below.

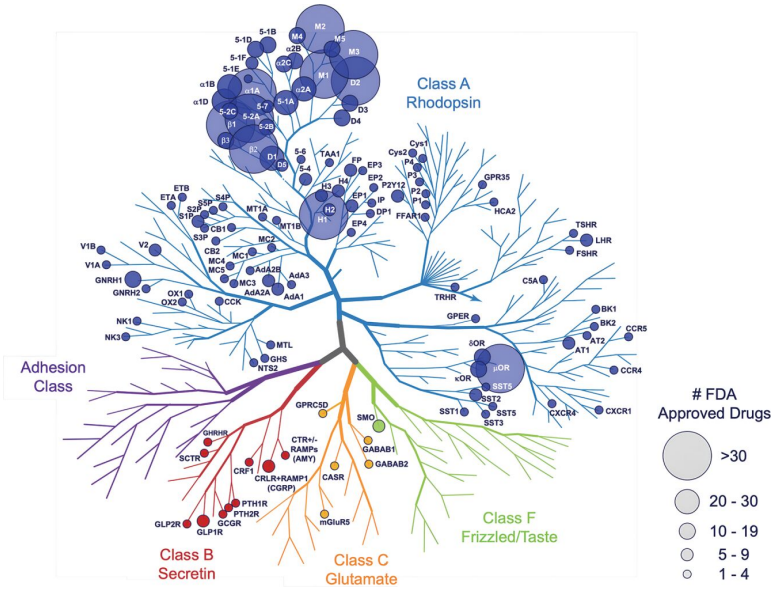


Figure 2. GPCR phylogenetic tree highlighting the number of FDA-approved drugs for each GPCR as of February 2024.

Today, approximately 75% of potential GPCR therapeutic targets remain undrugged, representing significant opportunity to address a vast range of therapeutic areas and diseases. And, even for certain validated GPCRs, novel binding pockets may exist that could offer enhanced therapeutic benefits.

Our Native Complex Platform™

In the past decade, the landscape of drug discovery has been revolutionized by advanced technologies that significantly impact small molecule drug discovery across various target classes. These innovations include structure-based drug design, computational docking, and DNA-encoded libraries (DELs). However, the full potential of these technologies has remained largely untapped for GPCRs due to challenges with isolating functional native GPCR proteins.

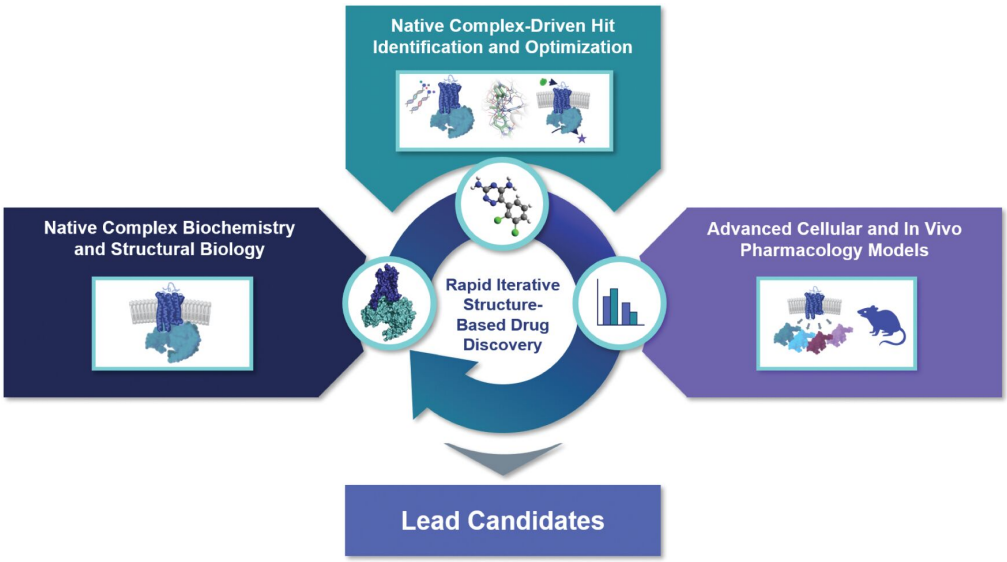
With our proprietary Native Complex Platform™, we can purify GPCRs outside of cells and reconstitute them into fully functional ternary complexes with transducer proteins (e.g., G proteins, beta-arrestins) and ligands (endogenous or synthetic), all housed within a well-defined lipid bilayer environment. These Native Complexes are full-length, properly folded GPCRs that retain their natural structure, function, and dynamics. We then apply state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging our platform, we are able to conduct GPCR oral small molecule drug discovery for a broad array of GPCR targets.

Our Native Complex Platform™ is powered by a suite of tools and technologies that we have optimized and integrated into a proprietary and industrialized workflow, and together form an efficient and iterative discovery process for identification and optimization of novel small molecule drug candidates targeting high-value GPCRs, including:

- ***Native Complex biochemistry and structural biology:*** Our Native Complexes reconstitute native GPCR function in a purified biochemical format, which enables efficient high-resolution, three-dimensional structure determination with cryo-EM. This can reveal receptor binding pockets that we can target with a range of pharmacologies (agonists, antagonists, and allosteric modulators) as well as novel insights into mechanisms for GPCR modulation.

- ***Native Complex-driven hit identification and optimization:*** We virtually screen our GPCR structures against ultra-large-scale computational databases containing billions of candidate molecules to identify the most promising small molecule compounds that bind in pockets on the GPCR structure. We use technologies, including DELs, to screen billions of candidate molecules simultaneously, and we have developed proprietary technologies to discover and optimize compounds with a variety of modes of action. In addition, we use our proprietary Native Complex biochemical screens in our hit identification and optimization processes.
- ***Advanced cellular and in vivo pharmacology models:*** We efficiently evaluate hits and lead compounds through the integration of advanced cellular and *in vivo* pharmacology models. Prioritized compounds with desired pharmacologies are then either advanced as potential drug candidates or fed back into the process for additional Native Complex-driven compound optimization.

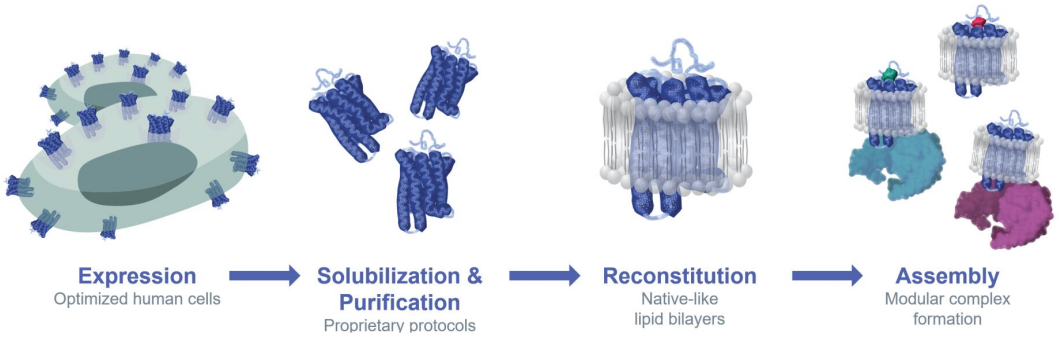
Our oral small molecule drug discovery process, powered by our proprietary Native Complex Platform™, is depicted in the figure below.



Our industrial-scale Native Complex Platform™ is designed to target certain GPCRs for the first time, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies, including agonists, antagonists, and allosteric modulators, to achieve desired therapeutic effects. We have successfully applied the technologies of our platform to identify novel, highly potent and selective oral small molecules, and for our most advanced programs, optimized them into clinical development candidates.

Native Complex Biochemistry and Structural Biology Capabilities

We have developed an industrialized workflow for creating Native Complexes, which involves reconstituting fully functional GPCRs outside their cellular context. As illustrated in the figure below, our process for creating a Native Complex begins with a human cell expression system that allows us to express GPCRs at high levels. We then extract these GPCRs using proprietary solubilization and purification protocols that maintain their stability and prevent denaturation. Following extraction, we reconstitute the GPCRs in an artificial lipid bilayer that closely mimics the natural cell membrane. These reconstituted GPCRs can be combined with ligands and/or separately purified transducers such as G proteins and beta-arrestins. These Native Complexes are modular assemblies, and a variety of different receptor states can be created by using different combinations of transducers and ligands.



Once we have isolated a Native Complex, we determine the high-resolution, three-dimensional structure of the GPCR and a bound compound using cryo-EM. Our in-house capabilities, tools, and technologies enable us to identify the precise binding orientation of a drug candidate with exceptional resolution. After generating the initial Native Complex structure, our advanced technologies enable us to efficiently produce subsequent high-resolution structures. To date, we have successfully determined the structures of over 80 high-resolution, three-dimensional GPCR structures with bound small molecule ligands spanning multiple mechanisms including agonists, antagonists, and allosteric modulators. Our structure-based drug discovery approach also allows us to uncover novel binding pockets on validated GPCRs that may offer enhanced therapeutic benefits. In a single lead optimization campaign, we typically generate 10-20 high-resolution structures, and our ability to generate new small molecule ligand-bound structures as quickly as within 1-2 weeks has allowed us to rapidly iterate and optimize our compounds efficiently into lead drug candidates.

Native Complex-Driven Hit Identification and Optimization

Once we have determined Native Complex structures and identified binding pockets of interest, we employ ultra-large scale virtual screening using extensive computational databases of make-on-demand compounds. To date, we have screened over 10 billion such compounds, computationally docking them into the binding pockets of our high-resolution, three-dimensional GPCR structures using proprietary algorithms and cloud-based computing. Upon identifying candidate compounds with optimal binding poses, we proceed to synthesize and test these compounds in functional assays to evaluate whether they exhibit the desired molecular pharmacology attributes.

Separately, we combine our Native Complexes with DELs to select for GPCR binders with specific functional profiles. DELs are combinatorial libraries of billions of small molecules synthesized with an added DNA barcode, and we leverage next-generation sequencing technologies to identify high-affinity binders that are optimally suited to modulate specific GPCRs of interest with desired mechanisms of action. We have developed proprietary DEL screening workflows and analysis methods to discover novel compounds with a wide spectrum of activities including agonists, antagonists, and allosteric modulators.

By integrating these advanced screening techniques into our Native Complex Platform™, we have been able to significantly enhance the efficiency and precision of our drug discovery efforts.

Advanced Cellular and In Vivo Pharmacology Models

Upon identifying highly potent, novel compounds, we proceed to test these compounds in novel cell-based assays and *in vivo* pharmacology models to evaluate whether the compounds exhibit desired drug-like properties. Only the most promising candidates that demonstrate the intended pharmacologic activity move forward into lead optimization campaigns. Other candidate compounds are fed back into our drug discovery process for additional Native Complex-driven compound optimization. For each of our programs, we have advanced from initiation of medicinal chemistry to potent drug-like compounds with activity in animal models in less than one year.

Our proprietary Native Complex Platform™ enables iterative structure-based GPCR drug design for what we believe is the first time at scale. Our Native Complex Platform™'s integrated approach of combining high-resolution structural insights with large-scale screening and rapid functional testing accelerates the discovery and optimization of new therapeutic compounds. Our industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of our pipeline of product candidates focused on treating patients across a variety of therapeutic areas.

Portfolio Opportunities Targeting the Full Breadth of GPCRs

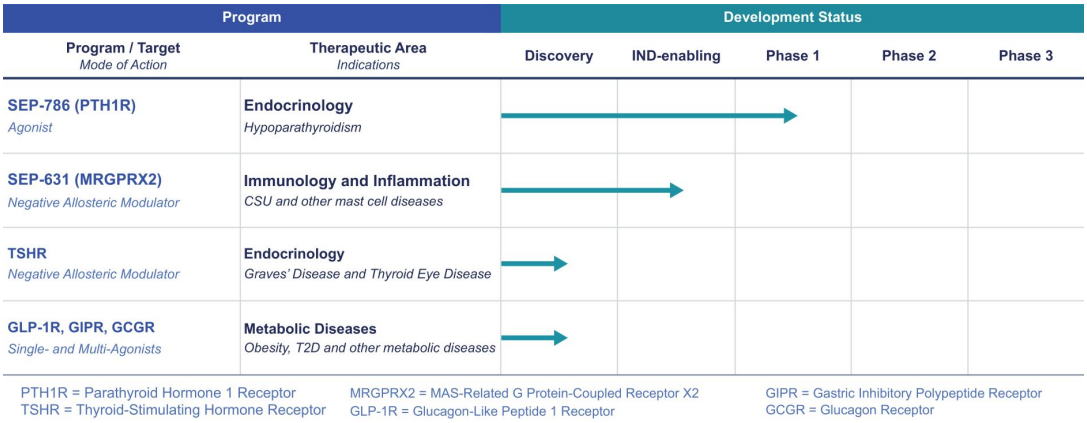
There are significant unmet medical needs across numerous GPCR-driven diseases. Our portfolio is focused initially on three therapeutic areas with the potential to expand to additional therapeutic areas in the future:

- ***Endocrinology****:* The endocrine system involves glands that secrete hormones into the bloodstream that have effects on other tissues. Central to this system are GPCRs, which serve as primary receptors for many circulating hormones. GPCR biology is at the center of endocrine diseases, such as hypoparathyroidism and Graves' disease, highlighting the urgency for therapeutic interventions targeting GPCR-mediated endocrine disorders. Other endocrine disorders, like osteoporosis, impacts more than 10 million older adults in the United States and could benefit from a small molecule GPCR-directed therapy to help rebuild bone mass.
- ***Immunology & inflammation****:* GPCRs serve as key signaling molecules in various cellular processes, including involvement in the regulation of immune responses and the activation of immune cells such as macrophages, T cells, and dendritic cells. Upon activation by extracellular ligands, GPCRs initiate intracellular signaling cascades that modulate cytokine production, leukocyte trafficking, and inflammatory mediator release. Dysregulation of GPCR signaling pathways is implicated in numerous inflammatory and autoimmune diseases, such as CSU, making them attractive targets for therapeutic intervention.
- ***Metabolic diseases****:* GPCRs are known to regulate various physiological processes such as energy metabolism, glucose homeostasis, and lipid metabolism. These receptors are involved in sensing nutrients, hormones, and other signaling molecules, thereby influencing appetite, insulin secretion, and lipid storage. Dysregulation of GPCR signaling pathways is associated with metabolic disorders, such as obesity and T2D. For instance, GPCRs like adrenergic receptors regulate lipolysis and thermogenesis, while receptors such as the GLP-1 receptor modulate insulin secretion and satiety. Targeting GPCRs is a clinically and commercially validated approach for the development of therapeutics that manage metabolic disorders, offering the potential to manage glucose levels, promote weight loss, and improve metabolic health.

Beyond our initial therapeutic areas of focus, we intend to evaluate opportunities in additional therapeutic areas where GPCRs are directly connected to disease pathology, including in areas of neurology, women's health, cardiovascular disease, and respiratory disease.

Our Pipeline

We are advancing a deep portfolio of highly potent and selective oral small molecule GPCR-targeted programs with novel mechanistic approaches to treat diseases across multiple therapeutic areas for patients with significant unmet needs. Our wholly-owned pipeline is focused initially on three therapeutic areas – endocrinology, immunology and inflammation, and metabolic diseases – and is summarized in the figure below.



Our target selection process considers the validation level of the GPCR and existing preclinical and/or clinical data demonstrating desired biological outcomes upon target modulation for a variety of different indications. We have prioritized indications with well-defined biomarkers to streamline the path to clinical proof-of-concept data, high unmet medical need and significant market opportunities. When analogous molecules exist that are approved or in clinical development, we explore differentiation opportunities and leverage our Native Complex Platform™ to address known limitations. We also leverage regulatory insights from established precedents to guide each program's development strategy. As we expand our portfolio of GPCR-targeted programs, we will continue to focus on targets and indications with well understood biology, predictive biomarkers for early proof-of-concept, efficient clinical development pathways, and high unmet medical need. We are building a deep portfolio comprised of programs that we can independently develop and commercialize upon regulatory approval, alongside select programs that may benefit from the development and commercial expertise, infrastructure and financial support of a strategic partner.

SEP-786: Oral Small Molecule PTH1R for Hypoparathyroidism

Our lead product candidate, SEP-786, is an oral small molecule agonist targeting PTH1R that we are developing for the treatment of hypoparathyroidism. While there are peptide products approved and in development for hypoparathyroidism that target PTH1R, to our knowledge, SEP-786 is the only clinical-stage oral small molecule PTH1R agonist today. We discovered and designed SEP-786 to have potent and selective activation of PTH1R, a GPCR highly involved in blood calcium control, with an optimized profile that achieves sustained normalization of serum calcium and phosphate upon once-daily or twice-daily oral dosing. Based on preclinical data observed to date, we believe SEP-786 has the potential to be a differentiated treatment for hypoparathyroidism. We have successfully completed IND-enabling studies and have initiated a Phase 1 clinical trial to assess preliminary safety, tolerability, PK, and PD of SEP-786. We expect to report data from this trial in mid-2025.

Overview of Hypoparathyroidism

Disease Background and Role of PTH1R

Hypoparathyroidism is a rare endocrine disease characterized by insufficient levels of PTH that affects approximately 70,000 patients in the United States and 140,000 patients in Europe. PTH is a critical hormone for

calcium and phosphate homeostasis and functions through the activation of PTH1R. Under normal physiological conditions, PTH is released from the parathyroid glands when circulating calcium levels are reduced and will act on PTH1R expressed on bone and kidney cells to increase calcium levels (see Figure 3). Most patients with hypoparathyroidism develop the condition following damage to or accidental removal of the parathyroid glands during thyroid surgery, while other etiologies include autoimmune and genetic disorders. Patients with hypoparathyroidism are at risk of both short-term and long-term complications and comorbidities, such as tingling or burning of the extremities, muscle cramps and spasms, abdominal pain, abnormal heart rhythm, cataracts, and fatigue and muscle weakness. Chronic hypoparathyroidism is associated with cognitive and emotional symptoms, such as mental lethargy, inability to concentrate, memory loss or forgetfulness, anxiety and depression. Many patients experience persistent symptoms that negatively impact quality of life and reduce work productivity.

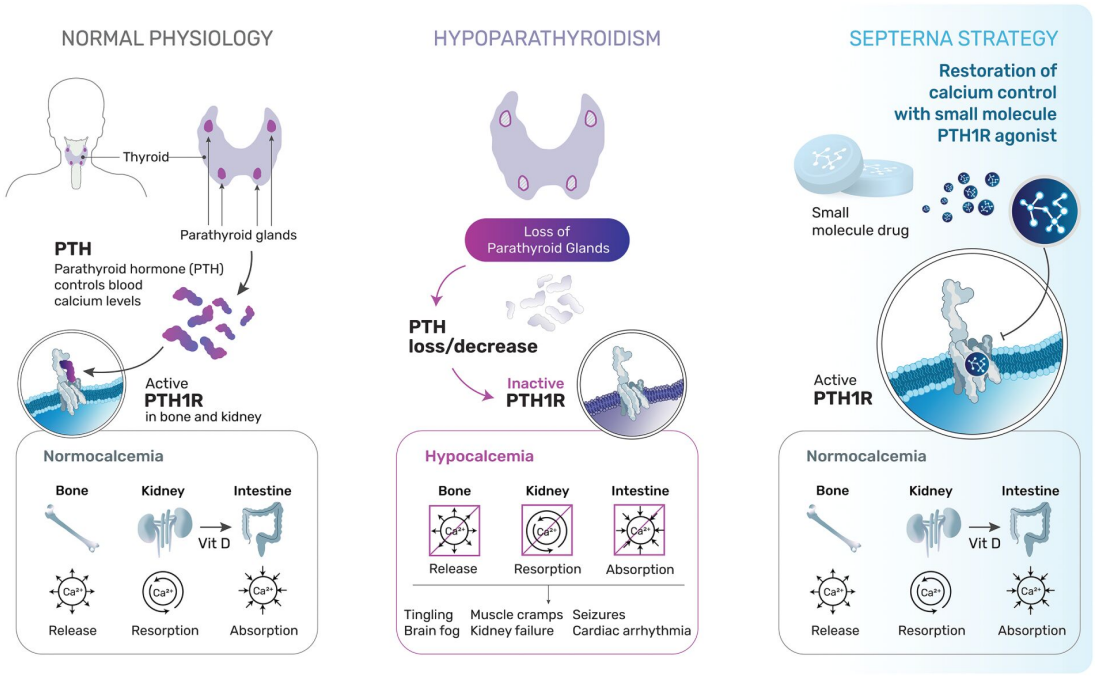


Figure 3. Overview of parathyroid hormone physiology, hypoparathyroidism, and our strategy to develop an oral small molecule PTH1R agonist to restore calcium homeostasis in patients with hypoparathyroidism.

Current Treatment Options and Their Limitations

The standard treatment for hypoparathyroidism consists of high-dose calcium supplements and activated vitamin D (calcitriol) several times a day, which aim to correct serum calcium levels. However, these therapies do not replace other functions of PTH to restore physiological mineral homeostasis, resulting in an increased risk of physical symptoms, including fatigue, paraesthesia, muscle cramping, tetany, and joint or bone pain, as well as long-term complications, such as soft-tissue calcifications and impaired renal function. For some patients with chronic hypoparathyroidism, a managed transition from a high daily calcium intake to a no- or low-calcium treatment regimen may reduce adverse events or complications, including kidney stones and hospitalization due to hyper- or hypocalcemia. Even among patients on conventional treatments whose serum calcium levels are within the normal range, these side effects limit the ability of currently available treatments to be safe and effective options for chronic long-term use.

Injectable synthetic PTH peptides have been validated in clinical trials to increase serum calcium and provide a more physiological alternative to conventional therapy. These therapies are designed to sustain PTH in

the normal physiological range, thereby more fully addressing the underlying condition. In 2015, NATPARA (parathyroid hormone) became the first and only FDA-approved prescription PTH injection that is taken with calcium and vitamin D to control hypocalcemia in adults with hypoparathyroidism. Since then, manufacturer Takeda voluntarily recalled NATPARA in the United States due to manufacturing issues and announced that it will discontinue global manufacturing of NATPARA by the end of 2024. Palopegteriparatide (marketed as YORVIPATH by Ascendis Pharma), an investigational prodrug of active PTH (1-34), received regulatory approval in the EU in 2023 and in the United States in 2024, as a hormone replacement therapy indicated for the treatment of adults with chronic hypoparathyroidism. While hormone replacement with injectable PTH peptides, either marketed or in clinical development, may effectively normalize calcium levels and manage disease complications, they require life-long daily injections.

Our Solution: Oral Small Molecule PTH1R Agonist

Our Program Strategy

We believe there is an unmet need for an oral small molecule PTH1R agonist that offers hypoparathyroidism patients a convenient, more physiological treatment option. Since conventional therapies, such as calcium and vitamin D, have limitations and do not restore other actions of PTH, such as bone turnover or renal calcium reabsorption, we believe an oral option that can increase serum calcium and replace the other functions of PTH, is needed for patients. Our potent and selective PTH1R agonist is designed to address all patients with hypoparathyroidism. This includes the most severe patients, who may start injectable PTH peptide therapy, as well as mild-to-moderate patients who are currently on high doses of calcium and vitamin D and may be less interested in an injectable PTH peptide.

Additionally, our Native Complex Platform™ affords us the opportunity to continuously iterate and optimize additional oral small molecule PTH1R agonists. We may develop additional molecules for hypoparathyroidism or for other indications where PTH1R agonists can address disease pathology, such as osteoporosis.

Preclinical Activity of SEP-786

Our Native Complex Platform™ was applied to PTH1R and yielded multiple tractable chemical series of small molecule PTH1R agonists with distinct binding sites. Iterative structure-based design for one of the chemical series and further lead optimization yielded our lead product candidate, SEP-786, for which we have initiated a Phase 1 clinical trial.

SEP-786 has demonstrated potent and selective activation of PTH1R in human, dog, and rat receptor *in vitro* models. *In vivo*, SEP-786 was generally well-tolerated and showed activity in a translational rat thyroparathyroidectomy (TPTx) model of hypoparathyroidism (Figure 4.A). In this model, surgical removal of the parathyroid glands replicates the human disease of hypoparathyroidism with a reduction in serum calcium from the normal range. To assess the activity of PTH1R agonists, compounds are dosed orally for small molecules or subcutaneously for peptides, which results in dose-dependent increases in serum calcium allowing for an assessment of compound activity and PK/PD relationships.

Single oral doses of SEP-786 were compared to single subcutaneous doses of a long-acting PTH peptide (LA-PTH) in the TPTx model (Figure 4.B). The 30 mg/kg oral dose of SEP-786 demonstrated a similar time-dependent increase in serum calcium levels to a 2 nmol/kg subcutaneous dose of LA-PTH with both doses resulting in serum calcium levels exceeding the normal serum calcium range (2.0-2.6 mmol/L). SEP-786 demonstrated dose-dependent serum calcium increase with oral doses of 3 mg/kg and 10 mg/kg resulting in serum calcium levels within the normal range.

In a 28-day repeat dose study (Figure 4.C), SEP-786 at 3 mg/kg dosed orally twice-daily provided sustained increases in serum calcium to within the normal range over the entire 28-day dosing period. SEP-786 also normalized phosphate levels, improved bone turnover markers, and increased active vitamin D production in this study.

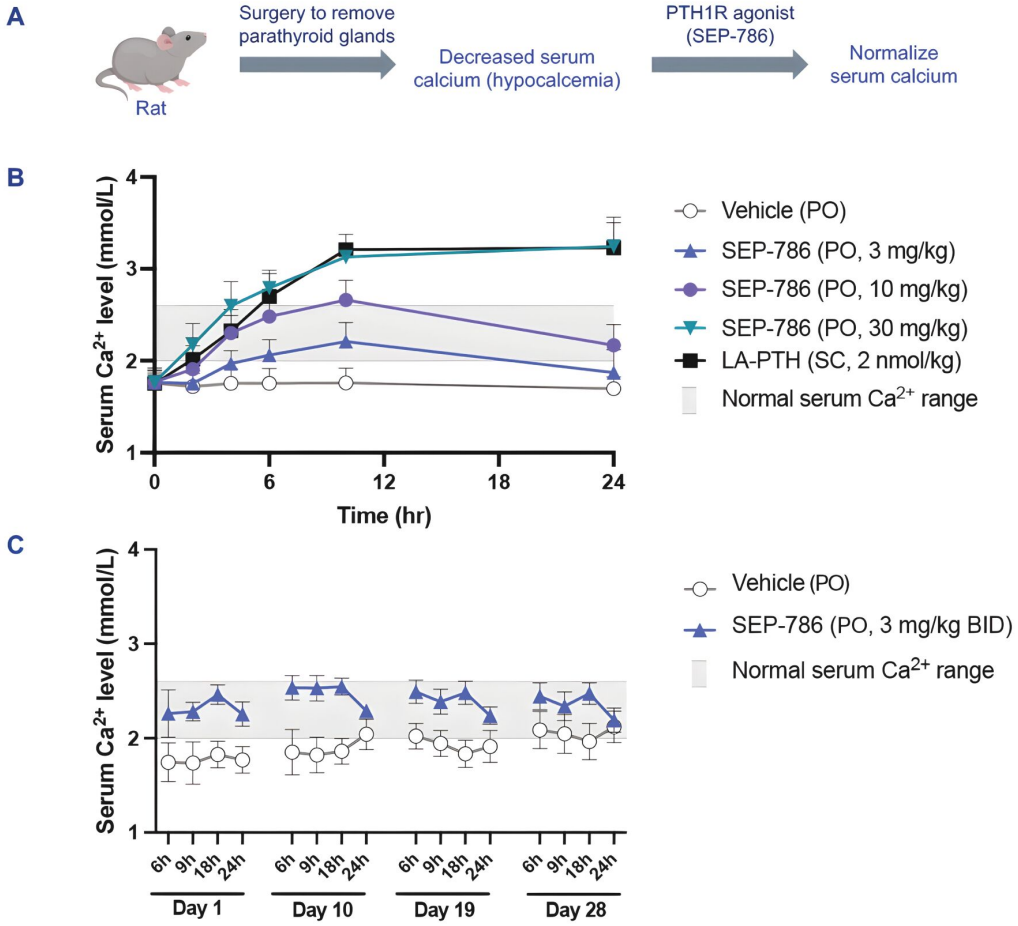


Figure 4. (A) Rat hypoparathyroidism disease model (thyroid-parathyroidectomy model, TPTx). (B) Single oral doses of SEP-786 in the TPTx model show dose-dependent increase in serum calcium. (C) Repeat twice-daily oral dosing of SEP-786 in the TPTx model shows sustained calcium control over 28 days of dosing. PO = oral; SC = subcutaneous; BID = twice-daily.

Preclinical Studies to Support Clinical Advancement of SEP-786

The PK profile of SEP-786 across multiple species was determined (Figure 5), to support human PK projections based upon allometric scaling of the nonclinical PK parameters, in addition to in vitro-in vivo extrapolation (IVIVE) of intrinsic clearance in human hepatocytes. These human PK models projected that SEP-786 will have a human half-life in the range of 9-27 hours following oral dosing.

A translational PK/PD model for SEP-786 was developed utilizing the serum calcium PK/PD relationship in TPTx rats and the predicted human PK. We believe this model supports a projection that once-daily or twice-

daily oral dosing of SEP-786 could lead to control of serum calcium within the normal range in patients with hypoparathyroidism.

Parameter	Mouse	Rat	Dog	Cyno
Oral Bioavailability (%F)	54	26-50	40-60	44
PO Half-life (hr)	4.6	4-8	5-7	8.2

Figure 5. Preclinical pharmacokinetic summary for SEP-786 across species. PO = oral; cyno = cynomolgus monkey.

In vitro and *in vivo* safety studies support that SEP-786 has a favorable safety pharmacology profile. In 28-day, repeat, oral dose Good Laboratory Practice (GLP) toxicology studies in rats and dogs, SEP-786 was generally well-tolerated. At doses significantly higher than projected human efficacious doses, sustained hypercalcemic effects on bone and kidney were observed that are consistent with exaggerated on-target pharmacology.

Clinical Development Plan and Status of SEP-786

We have submitted a Clinical Trial Notification (CTN) in Australia and have initiated a randomized, placebo-controlled, single-ascending dose (SAD) and multiple-ascending dose (MAD) Phase 1 clinical trial in up to 180 healthy adult participants designed to assess preliminary safety, tolerability, PK, and PD of SEP-786. In the SAD portion of the trial, we are evaluating the safety and tolerability of escalating oral doses of SEP-786. The MAD portion of the trial will evaluate once-daily and twice-daily oral dosing of SEP-786 for five days to evaluate safety and determine the optimal dosing regimen for serum calcium control. Secondary endpoints include PK, serum calcium, urinary calcium, and other biomarkers. We have initiated the Phase 1 clinical trial of SEP-786 and expect to report data from this trial in mid-2025. We currently intend to conduct Phase 2 and Phase 3 clinical trials in the United States and globally in select foreign jurisdictions, including at sites in Europe and Canada. We intend to seek approval for SEP-786 in Australia in the future. For more information, see the section titled "–Government Regulation–Review and Approval of Medicinal Products in Australia."

SEP-631: Oral Small Molecule MRGPRX2 NAM for CSU and Other Mast Cell Diseases

We are developing SEP-631, a selective, oral small molecule MRGPRX2 NAM, initially for the treatment of CSU. In preclinical studies, SEP-631 demonstrated potent and long-lasting inhibition of MRGPRX2, which is a highly and uniquely expressed receptor on mast cells and when activated is a key driver of CSU and other prevalent mast cell diseases. We have initiated IND-enabling studies of SEP-631 and upon completion, we anticipate submitting for regulatory clearance to initiate a clinical trial.

Overview of CSU

Disease Background and Role of MRGPRX2

CSU is a systemic inflammatory skin disease characterized by the spontaneous and recurrent appearance of itchy, painful hives, known as wheals, on the skin and angioedema, or swelling, that affects approximately 1.5 million patients in the United States. These chronic symptoms, which typically last between two and five years, can interfere with daily living, including the ability to work, and are frequently associated with psychiatric comorbidities, including depression and anxiety. Some patients with CSU report associated systemic symptoms including headache and fatigue, wheezing, flushing, palpitations, and gastrointestinal symptoms.

While there is no known trigger, the activation and degranulation of mast cells and release of histamine and other inflammatory mediators lead to these debilitating symptoms of CSU. Two canonical pathways represent the

primary mechanisms for activation and degranulation of mast cells: activation of the IgE pathway via receptor cross-linking by antibodies targeting the high-affinity IgE receptor (FceRI) or IgE itself, and activation of an IgE-independent pathway via MRGPRX2. As depicted in Figure 6 below, upon activation, mast cells release a plethora of mediators leading to the hallmark symptoms of itching, redness, and swelling.

MRGPRX2 is highly expressed on the surface of mast cells and plays a critical role in mast cell activation and degranulation. This receptor is activated by a variety of stimuli, including neuropeptides, antimicrobial peptides, and certain drugs. Upon activation, MRGPRX2 triggers a signaling cascade that leads to the rapid release of pre-stored mediators such as histamine, proteases, and cytokines from mast cell granules. This degranulation process contributes to immediate hypersensitivity reactions and various inflammatory conditions. The unique ability of MRGPRX2 to respond to a broad range of ligands highlights its importance in host defense mechanisms and its potential as a therapeutic target for treating allergic and inflammatory diseases.

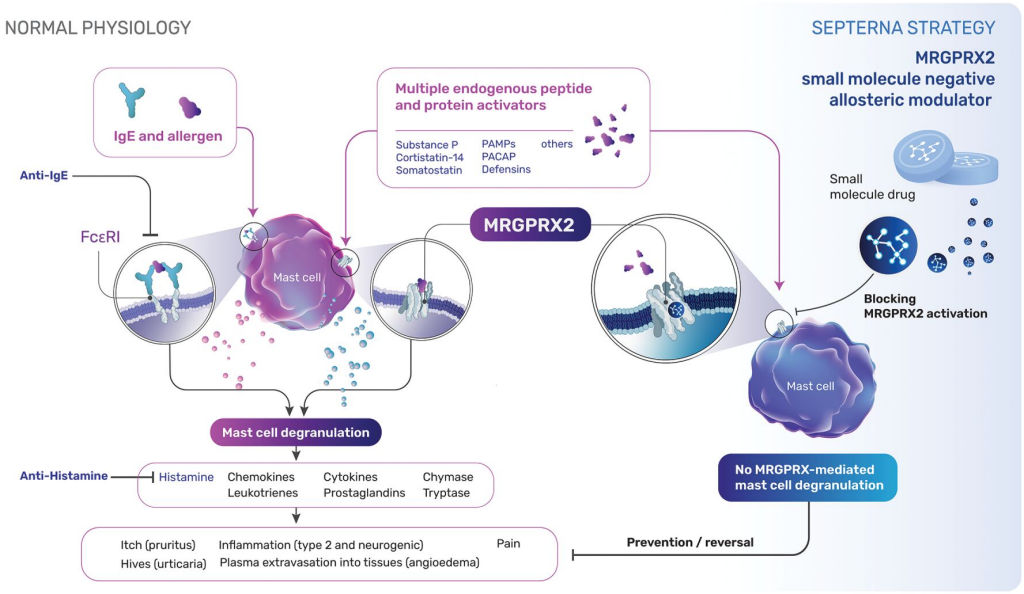


Figure 6. Overview of mast cell activation including the IgE-mediated and MRGPRX2-mediated degranulation pathways, physiologic effects of mast cell degranulation, and our strategy to develop a MRGPRX2 NAM to stop MRGPRX2-mediated mast cell degranulation.

Current Treatment Options and Their Limitations

Patients suffering from CSU are treated initially with antihistamines to control symptoms; however, approximately 37% of patients are inadequately controlled in this first-line setting. In the antihistamine-refractory setting, patients may be treated with omalizumab (marketed as Xolair by Novartis and Genentech), which is an injectable anti-IgE monoclonal antibody approved by the FDA as an add-on therapy for CSU in patients ages 12 years and older. The targeting and blocking of IgE-mediated inflammation can effectively address symptoms; however, only an estimated 36% of these antihistamine-refractory patients respond to anti-IgE therapy.

A significant proportion of patients have persistent symptoms with antihistamines and/or Xolair, highlighting substantial need for additional treatment options. With the expanding knowledge of the pathogenesis of CSU and the role of mast cells, novel therapeutic agents targeting distinct drivers of CSU are in development.
We are aware of several new mechanisms, and programs are being explored in clinical trials, such as anti-Kit

antibodies barzolvolimab and briquilimimab, Bruton's tyrosine kinase inhibitor remibrutinib, and antibody to sialic acid-binding immunoglobulin-like lectin lirentelimab.

Our Solution: Oral Small Molecule MRGPRX2 NAM

Our Program Strategy

We believe an oral small molecule that targets MRGPRX2 could provide a differentiated treatment option for patients with CSU. Our MRGPRX2 NAM program is designed to selectively inhibit mast cells, minimizing the risk of broad immunosuppression, which might be observed with other mechanistic approaches that either eradicate mast cells or inhibit multiple immune cell types. We believe selective mast cell inhibitors have the potential to be safer treatment alternatives and could be used for both monotherapy and combination therapy. With our NAM, we believe that we may be able to universally block all endogenous MRGPRX2 and prevent MRGPRX2 activation even in the presence of high concentrations of MRGPRX2 agonists. We believe that with this combination of features, our NAM could have the potential to control patient symptoms and protect against disease flares.

We are developing SEP-631 initially for the treatment of CSU, as we believe this may provide an efficient path to clinical proof-of-concept. There remains a significant unmet need in CSU, since antihistamine-refractory patients have few oral treatment alternatives. Because multiple diseases are driven by activated mast cells, we believe there is an opportunity to expand into indications across several therapeutic areas, such as allergic asthma, atopic dermatitis, interstitial cystitis, migraine, and prurigo nodularis.

Preclinical Activity of SEP-631

SEP-631 has been demonstrated to potently block the activation of intracellular signaling in HEK293 cells with overexpressed human MRGPRX2 stimulated by cortistatin-14 (IC_{50} = 1.6 nM). Experiments using a matrix of different concentrations of SEP-631 versus different concentrations of cortistatin-14 showed strong suppression of maximal agonist effects (Figure 7), which we believe demonstrates SEP-631 has the potential to be a NAM which, when bound to MRGPRX2, cannot be outcompeted by excess amounts of an MRGPRX2 agonist.

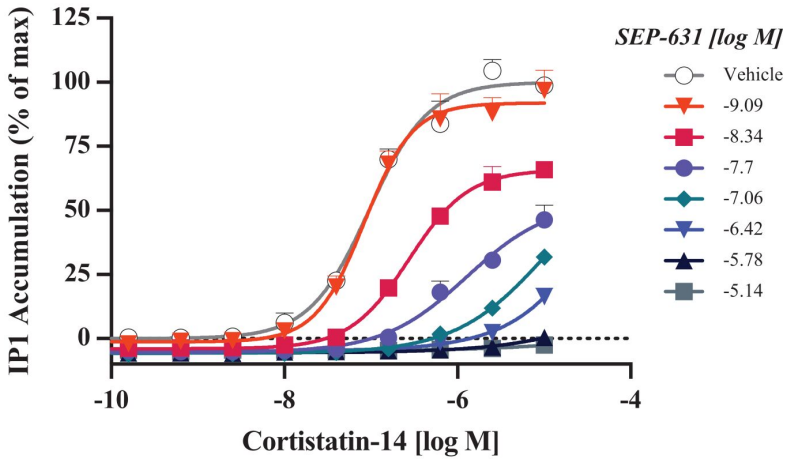


Figure 7. SEP-631 shows strong negative allosteric modulation of cortistatin-14 activation of MRGPRX2 in HEK293 cells expressing MRGPRX2.

SEP-631 can block IP1 accumulation in HEK293 cells expressing MRGPRX2 in response to activation by several clinically relevant endogenous MRGPRX2 agonists (Figure 8), demonstrating that its inhibitory effect is independent of the activating agonist (i.e., the inhibitor does not show probe dependence).

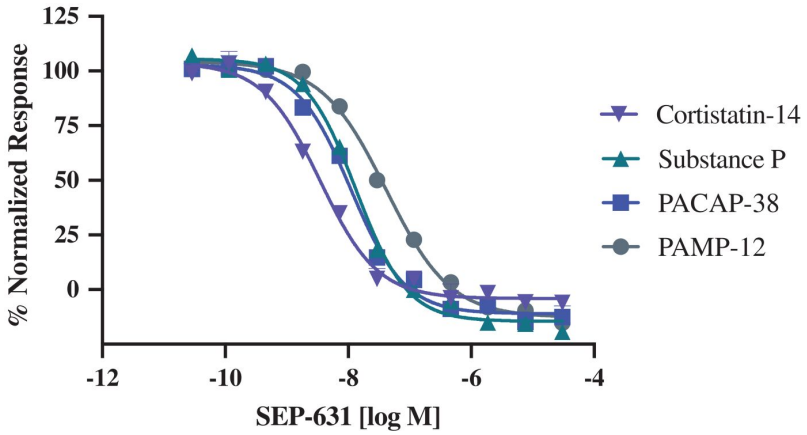


Figure 8. SEP-631 potently inhibits the activation of MRGPRX2 by a range of endogenous MRGPRX2 agonists.

In different *in vitro* cellular models of mast cell degranulation, SEP-631 was shown to be a potent inhibitor of activation and degranulation in LAD2 cells (IC_{50} = 2.3 nM) and primary human cord blood-derived mast cells (IC_{50} = 0.72 nM). In typical experiments on primary human skin mast cells, SEP-631 fully and potently inhibited tryptase release triggered by an EC_{90} concentration of Substance P (IC_{50} = 12 nM) (Figure 9).

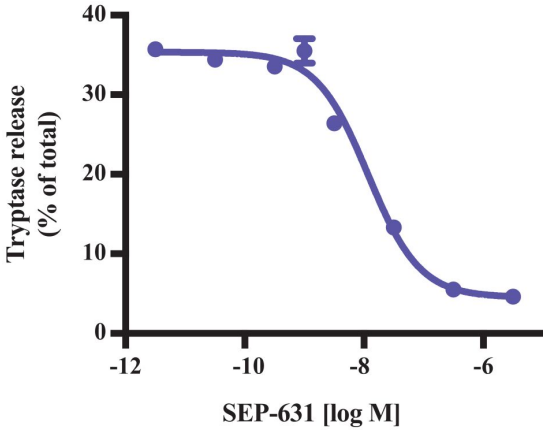


Figure 9. In typical experiments on human skin mast cells, SEP-631 potently inhibited Substance P-stimulated tryptase release from primary human skin mast cells.

A key feature of SEP-631 compared to other third-party MRGPRX2 inhibitors is its long target residence time or slow off-rate of inhibition, meaning it takes a long time for the receptor-ligand complex to dissociate and for the receptor to become activatable again. Two experimental approaches were taken to determine the half-life of the receptor-ligand complex: radioligand binding experiments and one surface plasmon resonance (SPR) study
demonstrated long half-lives of 124 minutes (with a standard deviation of 20 minutes) and 50 minutes,

respectively. Long target residence times of receptor ligands are recognized as being potentially advantageous for prolonged drug action *in vivo*, which have been shown to translate to enhanced clinical activity.

For characterization of SEP-631 *in vivo*, we developed a transgenic knock-in (KI) mouse model in which the coding region of the endogenous mouse MRGPRB2 receptor was replaced with the human MRGPRX2 receptor, due to the low sequence homology shared between the mouse and human orthologs. In this model, MRGPRX2 agonist ligands such as substance P or cortistatin-14 stimulate robust plasma extravasation, or edema, when injected into the skin. Extravasation can be quantitated by following the redistribution of Evans Blue dye from the circulation into skin tissue (Figure 10.A). In the MRGPRX2 KI mouse model, SEP-631 robustly inhibited skin extravasation when dosed orally prior to the cortistatin-14 skin challenge, demonstrating complete blockade of skin mast cell degranulation at an oral dose of 3 mg/kg (Figure 10.B).

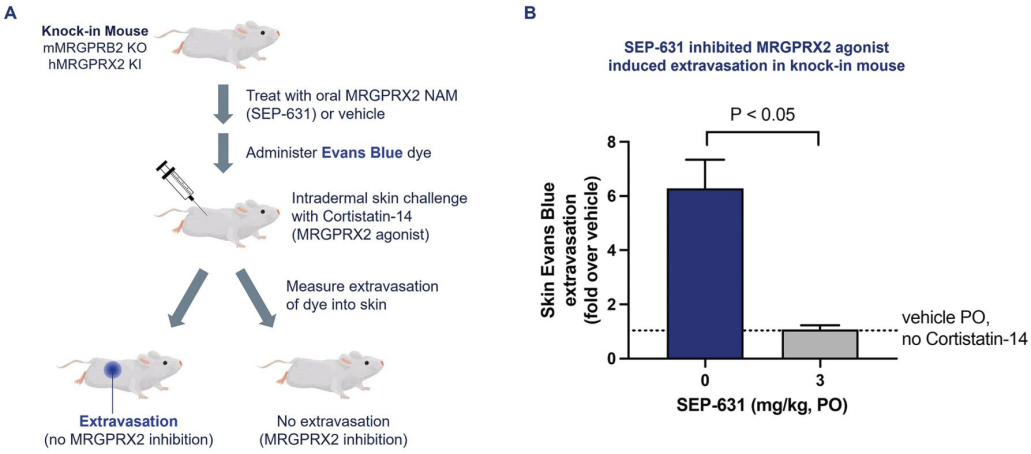


Figure 10. (A) Human MRGPRX2 KI mouse model of plasma extravasation into skin. (B) SEP-631 potently inhibited cortistatin-14 mediated plasma extravasation into skin in a human MRGPRX2 KI mouse model. PO = oral.

Preclinical Studies to Support Clinical Advancement of SEP-631

The preclinical drug metabolism and PK profile of SEP-631 across multiple species was determined to support human PK projections. SEP-631 has the potential to be highly orally bioavailable with low clearance and a projected half-life consistent with once-daily oral dosing.

In vitro and *in vivo* safety studies explored to date support that SEP-631 has a favorable tolerability profile. In 14-day repeat oral dose non-GLP toxicology in rats and dogs, SEP-631 was generally well tolerated with wide safety margins over projected maximal exposures at human efficacious doses. We have initiated 28-day GLP toxicology studies in rats and dogs.

Clinical Development Plan and Status of SEP-631

We plan to develop SEP-631 initially for patients with antihistamine-refractory CSU. SEP-631 is currently in IND-enabling studies, and upon completion, we anticipate submitting for regulatory clearance to initiate a Phase 1 clinical trial. The Phase 1 clinical trial is intended to be a SAD/MAD trial in healthy volunteers to assess safety, tolerability, PK, and PD.

In addition to CSU, we are evaluating a range of other indications in which aberrant mast cell activation has been demonstrated to be central to disease pathobiology. Mast cell activation drives multiple prevalent diseases,

including allergic asthma, atopic dermatitis, interstitial cystitis, migraine, and prurigo nodularis, and we believe SEP-631 could offer a novel oral treatment option for these patient populations. We plan to explore these indications as potential future clinical development opportunities.

TSHR Program: Oral Small Molecule TSHR NAM for Graves' Disease and TED

We are developing a novel, oral small molecule TSHR NAM for the treatment of Graves' disease and TED. We believe our TSHR NAM could offer a disease-modifying treatment that directly addresses the pathobiology of both diseases by blocking TSHR overactivation caused by patients' autoantibodies. We are advancing several lead compounds towards selection of a development candidate for IND-enabling studies.

Overview of Graves' Disease and TED

Disease Background and Role of TSHR

Graves' disease is one of the most prevalent autoimmune conditions affecting over 2 million patients in the United States and is the leading cause of hyperthyroidism. In Graves' disease, the body produces autoantibodies that bind to and activate TSHR on thyroid cells (Figure 11). These autoantibodies stimulate the thyroid gland to produce excess thyroid hormone, resulting in hyperthyroidism. Thyroid hormones affect many body systems, so symptoms of Graves' disease can be wide ranging. Common symptoms of Graves' disease include anxiety and irritability, tremors, heat sensitivity, weight loss, rapid or irregular heartbeat, and sleep disturbance. Although Graves' disease may affect anyone, it is more common among women and people younger than age 40.

TED is a related, yet distinct, vision-threatening autoimmune condition that develops in approximately 50% of Graves' disease patients. In TED, autoantibodies bind to and activate TSHR on orbital fibroblasts located behind the eyes, thereby resulting in inflammation, orbital fat expansion, and fibrosis. TED is a progressive disease and early diagnosis and treatment is important to prevent worsening and serious eye damage, including proptosis (eye bulging), strabismus (misalignment of the eyes), and diplopia (blurred or double vision).

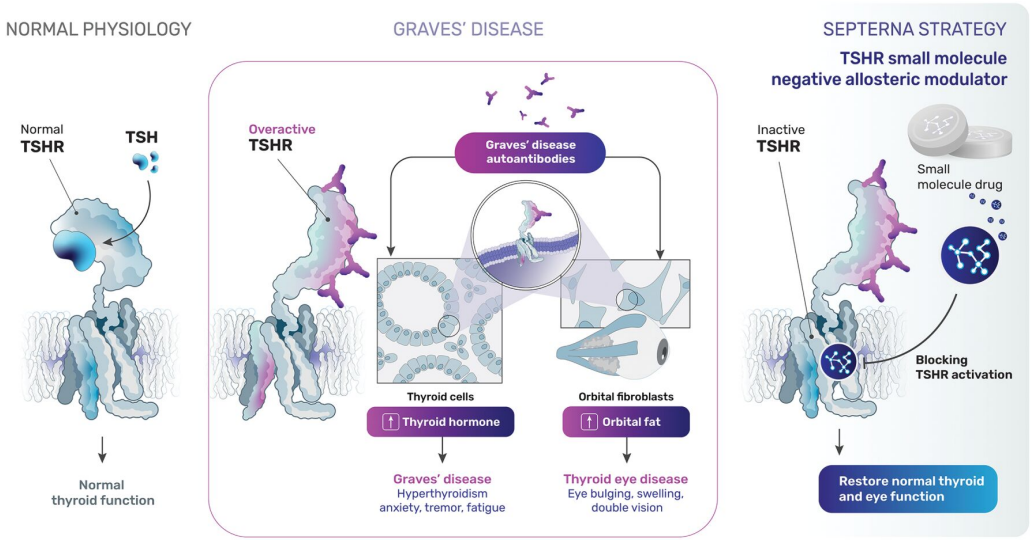


Figure 11. Overview of TSHR physiology, the role of TSHR autoantibodies in the pathogenesis of Graves' disease and TED, and our strategy to develop a TSHR NAM to reverse the effects of TSHR antibodies as a potential disease-modifying therapy for patients with Graves' disease and TED.

Current Treatment Options and Their Limitations

The most common treatments for Graves' disease have remained largely unchanged over the past 70 years and include antithyroid drugs, such as methimazole and propylthiouracil, designed to lower the amount of hormone the thyroid makes or block the effects of thyroid hormone on the body, radioactive iodine therapies that aim to destroy overactive thyroid cells, and thyroidectomy surgery to remove all or part of the thyroid. For many patients, there is a high rate of disease recurrence after treatment with antithyroid drugs, and lifelong hypothyroidism develops after ablation and thyroidectomy. In addition, these treatment options may initially address the underlying symptoms, but they are not disease-modifying and do not stop disease progression.

Current treatments for TED depend on disease severity and are designed to help manage symptoms and slow disease progression. For patients with mild TED, lifestyle changes and over-the-counter remedies, such as artificial tear drops and selenium supplements, may help with dry eye relief. For severe TED, steroids and/or eye surgery, such as orbital decompression may be considered. Historically, patients have had to live with TED until the inflammation subsides, after which they are often left with permanent and vision-impairing consequences and may require multiple surgeries that do not completely return the patient to their pre-disease state. In 2020, the FDA approved TEPEZZA (teprotumumab-trbw), an anti-IGF-1R human monoclonal antibody, for the treatment of TED based on its ability to decrease proptosis and resolve diplopia in patients. Despite reaching global sales of $2.0 billion in 2022, TEPEZZA requires several IV infusions over several months and has risks of serious side effects, including hearing loss and metabolic issues, such as hyperglycemia.

Our Solution: Oral Small Molecule TSHR NAM

Our Program Strategy

We believe there is a significant unmet need for a disease-modifying approach that directly addresses the pathobiology of both Graves' disease and TED. Our highly selective, oral small molecule TSHR NAM program is designed to block the activation of TSHR by autoantibodies and could lead to a universal treatment option for all Graves' disease and TED patients. Our NAMs are designed to prevent the activation of TSHR even in the presence of excess amounts of TSHR activating autoantibodies, thus potentially providing protection for patients with high serum antibody levels and for patients with polyclonal activating antibodies.

With few innovative, non-surgical or ablative treatments, we believe that there is a significant unmet need in Graves' disease. While treatments exist for TED, they are focused on the most severe patients, so an oral small molecule TSHR NAM, could provide a new option for all TED patients. Because over-stimulation of TSHR is at the center of Graves' disease and TED, we believe that if we can treat Graves' disease patients early in their disease course with our oral small molecule TSHR NAM, our treatment may be able to prevent the progression to other manifestations of the disease, such as TED or Graves' dermopathy.

Discovery and Preclinical Activity of Oral TSHR NAMs

We have used our Native Complex Platform™ to identify multiple tractable chemical series of oral small molecule TSHR NAMs. Molecular pharmacology studies with TSHR NAMs have demonstrated multiple compound series with high potencies and desired drug-like properties. In cells expressing human TSHR, cAMP signaling activated by an autoantibody isolated from a Graves' disease patient was significantly inhibited with several of our lead compounds. In addition, our compounds exhibit high selectivity for inhibition of TSHR over a broad set of other GPCRs.

An effective treatment for both Graves' disease and TED will require broad inhibition of patient autoantibodies, which are typically high affinity and present at high titers during active disease. Furthermore, these autoantibodies may bind to different sites on the large extracellular domain of TSHR. We believe a TSHR NAM can have an optimized pharmacologic profile to fully block the activity of all patient autoantibodies.

Experiments using a matrix of different concentrations of one of our oral small molecule TSHR NAMs (SP-1351) versus different concentrations of a Graves' disease patient activating autoantibody showed strong suppression of maximal agonist effects on TSHR, even when the agonist antibody is applied at high concentrations (Figure 12). We believe these results suggest that the antibody cannot overcome the inhibitory effects of our compound when it is bound to TSHR.

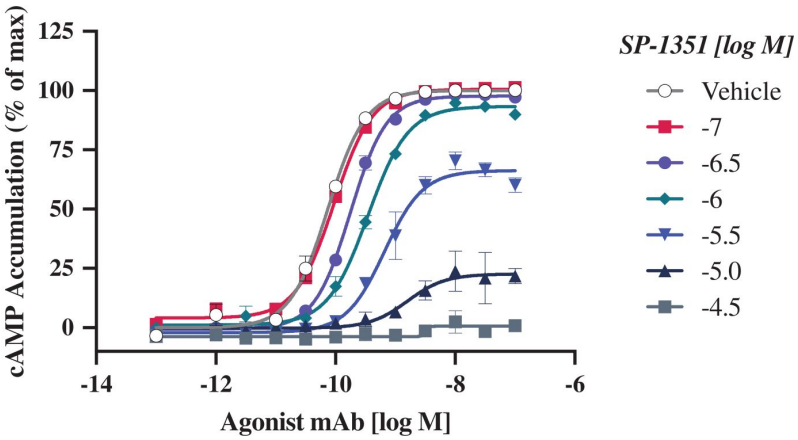


Figure 12. SP-1351 shows strong TSHR NAM in HEK293 cells stimulated with a Graves' disease patient-derived autoantibodies against TSHR. mAb = monoclonal antibody.

To demonstrate that our TSHR NAM can fully inhibit multiple patient autoantibodies, we assessed the activity of SP-1351 against Graves' disease patient-derived polyclonal sera applied to TED patients' orbital fibroblasts. Fibroblast activation by the sera is measured by quantifying hyaluronic acid production by the cells. SP-1351 was able to inhibit the activity of 10 out of 10 polyclonal sera samples, each from a different Graves' disease patient (Figure 13). This result suggests broad inhibitory activity of our TSHR NAMs against the diverse range of polyclonal autoantibodies found in Graves' disease patients.

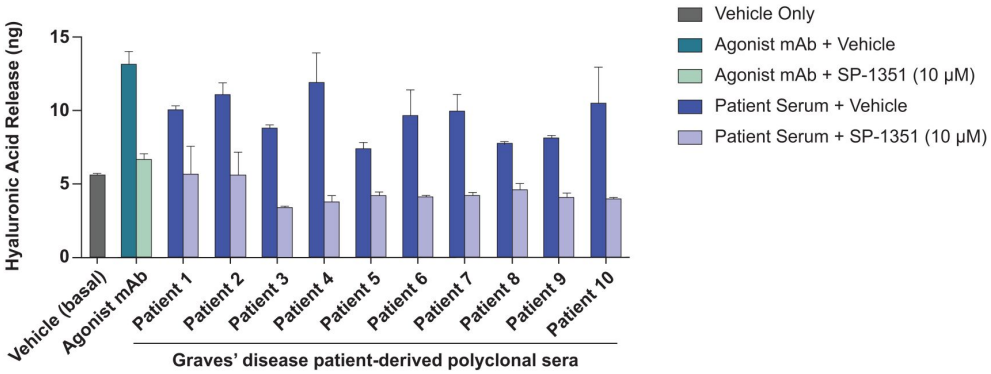


Figure 13. SP-1351 inhibits activation of primary orbital fibroblasts by all 10 polyclonal serum samples collected from Graves' disease patients. mAb = monoclonal antibody.

To characterize the effects of these oral TSHR NAMs on disease manifestations *in vivo*, we developed a translational mouse model of hyperthyroidism (Figure 14.A). Mice chronically treated with a Graves' disease patient-derived TSHR-activating antibody developed multiple manifestations similar to Graves' disease patients

including increased plasma thyroid hormone T4 levels (Figure 14.B), increased thyroid weight (Figure 14.C), and proptosis (Figure 14.D). After one week of SP-1351 treatment with repeat oral dosing, several of these manifestations showed signs of reversal including normalization of thyroid hormone T4 levels, reduction in thyroid weight, and reduction of proptosis.

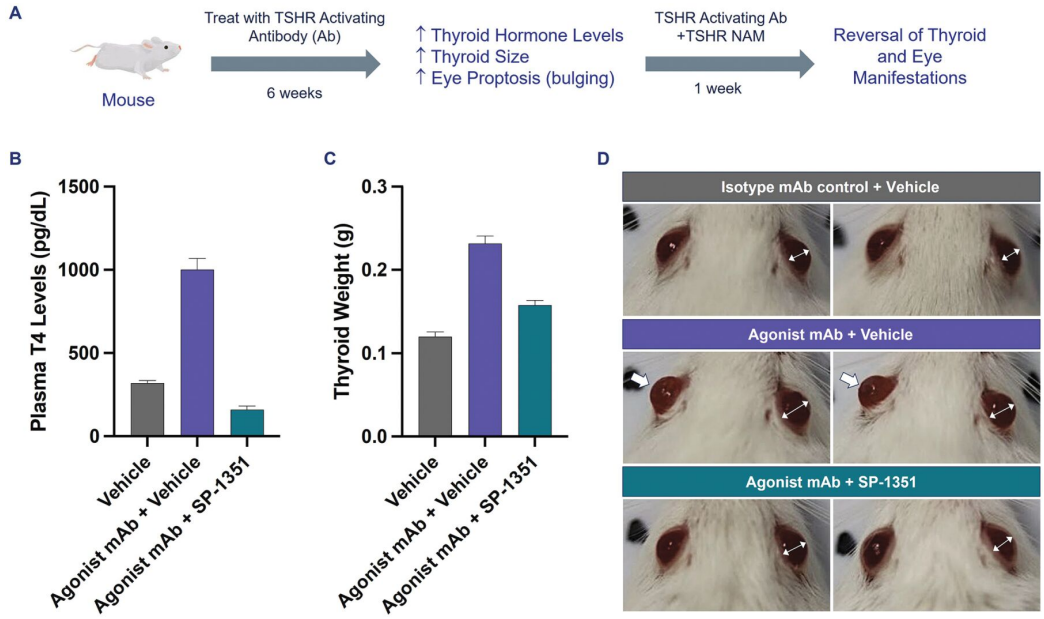


Figure 14. (A) Translational *in vivo* mouse model of Graves' disease. (B,C,D) SP-1351 demonstrates reversal of the hyperthyroid state and proptosis in mice chronically treated with a monoclonal TSHR autoantibody. mAb = monoclonal antibody.

In the same mouse model, effects on thyroid tissue were assessed. Thyroid glands of Graves' disease patients are characterized by follicular hyperplasia and/or hypertrophy, intracellular colloid droplets, follicular colloid reduction and scalloping, increased vascularity and lymphocyte infiltration, all of which manifest in our mouse disease model. After oral treatment with SP-1351, we observed significant reduction in follicular hypertrophy and colloid droplets.

Next Steps

We are continuing to optimize multiple early-stage oral small molecule TSHR NAMs, with the goal of advancing lead compounds towards selection of a development candidate for IND-enabling studies. In our preclinical studies, we have identified multiple TSHR NAMs that demonstrated the ability to reverse hyperthyroidism and proptosis in a novel mouse model of Graves' disease and inhibit of multiple Graves' disease patient TSHR autoantibodies in cell-based assays using primary human cells. We intend to pursue future clinical development of our TSHR NAM program for the treatment of Graves' disease and TED.

Incretin Programs: Oral Small Molecule Single- and Multi-Incretin Receptor Agonists for Metabolic Disorders Including Obesity and T2D

Based on unique chemical and structural insights obtained with our Native Complex Platform™, we believe we have an opportunity to discover and develop novel, next-generation, oral small molecules as selective single- or multi-acting GLP-1, GIP, glucagon receptor agonists. We are advancing several lead compounds towards selection of one or more development candidates for IND-enabling studies.

Overview of Obesity and T2D

Disease Background and Role of Incretins

Obesity and diabetes are two of the most prevalent chronic diseases in the world, affecting a combined total of more than 800 million people, and are associated with severe health complications, including cardiovascular disease and kidney failure, as well as an increased risk of death. Obesity is defined as having a BMI of greater than or equal to 30 and is associated with more than 200 comorbidities, including diabetes, which can lead to blindness, limb amputations, and the need for dialysis. Despite increased awareness about obesity as a global epidemic and the advancement of new treatments, no country has reported a decline in obesity prevalence across its entire population. It is predicted that 1.55 billion people will be living with obesity globally by 2030.

More than 400 million people worldwide live with diabetes and approximately 90% of all diabetes cases are T2D, which is a chronic disease involving sustained high levels of glucose in the bloodstream. Under normal conditions, insulin is produced by the pancreas, enabling glucose to enter cells to provide energy needed for normal tissue and organ function. T2D results from either the pancreas not producing enough insulin or the body's cells not responding normally to insulin, known as insulin resistance. Uncontrolled diabetes can lead to severe health complications, such as an increased risk of heart attack, stroke, neuropathy, kidney failure, limb amputations, and vision loss. The key risk factors for developing T2D include obesity, genetic predisposition, a sedentary lifestyle, or a history of gestational diabetes. Moreover, T2D and obesity are considered co-morbidities, with 90% of people with T2D being overweight or obese.

Incretins (e.g., GLP-1, GIP, and glucagon) are a group of metabolic hormones that, along with their associated receptors, play significant roles in glucose metabolism and homeostasis (Figure 15). GLP-1 and GIP are secreted in the intestinal tract after eating, and subsequently activate their respective receptors expressed on pancreatic beta cells, to stimulate insulin secretion in a glucose-dependent manner. Glucagon activates its related receptors expressed on pancreatic alpha cells, to counteract the actions of insulin by stimulating hepatic glucose production and thereby increases blood glucose levels in a glucoregulatory role. The widespread therapeutic effects of GLP-1 and GIP receptor agonism in patients with diabetes are well-documented and include slowing of gastric emptying, increased satiety, reduction of food intake, promotion of weight loss, and reduction of cardiovascular disease morbidity and mortality. Moreover, there is a complex interplay between the actions of GLP-1, GIP, and glucagon, and recent clinical data from the triagonist injectable peptide retatrutide (in development by Eli Lilly and Company) indicate there are potential additional efficacy benefits on weight loss and its maintenance.

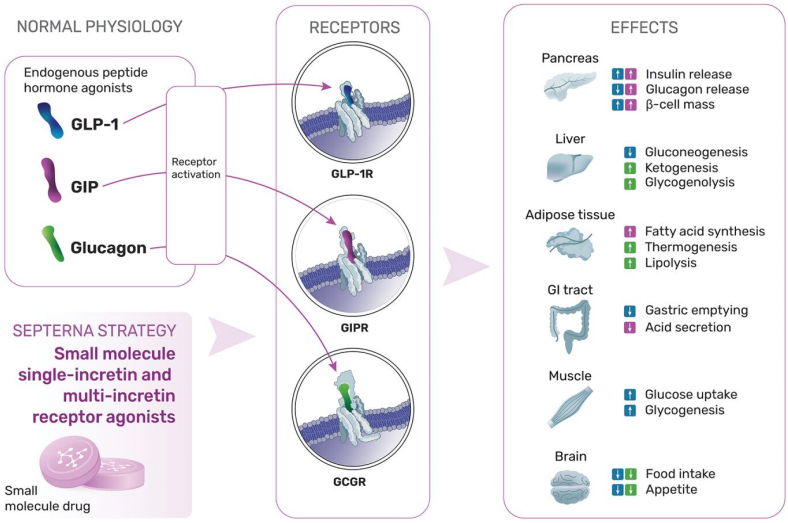


Figure 15. Overview of the physiologic effects of GLP-1, GIP, glucagon acting through their respective receptors GLP-1R, GIPR, and GCGR, and our strategy to develop oral small molecule single- and multi-incretin receptor agonists.

Current Treatment Options and Their Limitations

Standard treatment for obesity and T2D is lifestyle change through a combination of diet, exercise, and behavior therapy, and, in the case of T2D, metformin. According to the 2022 ADA Standards of Medical Care in Diabetes, management of obesity is an important factor in the treatment of diabetes since even a small degree of weight loss can improve blood glucose levels, resulting in a decreased need for glucose-lowering medications. While lifestyle modifications can produce weight loss, the magnitude required for disease modification is approximately 10% to 15% of total body weight.

In recent years, several injectable peptide agonists targeting incretins have been approved for the treatment of T2D, and, due to their ability to increase feelings of fullness, decrease appetite, and effectively promote weight loss, for the treatment of obesity. Third-party clinical data with incretin receptor therapeutics have demonstrated substantial and sustained reductions in body weight, as well as the ability to lower blood glucose and improve glycated hemoglobin (HbA1c). Global sales in 2023 for Ozempic and Wegovy (semaglutide, each marketed by Novo Nordisk), and Mounjaro and Zepbound (tirzepatide, each marketed by Eli Lilly and Company) were $18.4 billion and $5.3 billion, respectively. As a class, the marketed GLP-1 and GLP-1/GIP products generated $36 billion in global sales in 2023. While the benefits of currently marketed GLP-1 and dual GLP-1/GIP receptor agonists are well-documented in patients with diabetes and obesity, they suffer from several limitations including tolerability, prolonged titration schemes, and injection administration, and supply challenges. The most frequent adverse events with GLP-1 receptor agonists are GI-related issues, including nausea, vomiting, and diarrhea, which necessitate dose titration protocols to manage treatment and often contribute to treatment discontinuation. Finally, certain doses of semaglutide and tirzepatide are currently on several global health authorities' drug shortage lists, highlighting the need for additional scalable treatment options.

Beyond currently available treatment options, we are aware of numerous injectable peptides in clinical development that are exploring the combination of agonist activities at the GLP-1, GIP, and glucagon receptor metabolic targets. In addition, orally administered GLP-1 receptor small molecules are being clinically evaluated.

Our Solution: Oral Small Molecule Single- and Multi-Incretin Receptor Agonists

Our Program Strategy

We believe there remains a significant unmet need in the treatment of diabetes, obesity and other cardiometabolic disorders to discover and develop products that can deliver the activity of mono- or multi-acting injectable peptide agonists, like semaglutide or tirzepatide, but as oral small molecules. By exploring novel, single-acting or various multi-acting GLP-1, GIP and glucagon receptor agonists, we believe that we have the potential to discover and develop oral products that have the potential to increase patient convenience and compliance, and to improve tolerability, ultimately expanding the treated population. Given the significant market opportunity, we are leveraging our Native Complex Platform™ to discover novel scaffolds across various product profiles to explore multiple different treatment options for patients.

Discovery and Preclinical Activity of Oral Incretin Receptor Agonists

We have used our Native Complex Platform™ to identify multiple tractable chemical series of oral small molecule incretin receptor agonists. Structural biology demonstrated that our compounds occupy novel binding sites, distinct from the known orthosteric binding sites occupied by clinical-stage small molecules, danuglipron and orforglipron. Analysis of the respective binding sites show a high similarity of more than 80-90% for GLP-1, GIP, and glucagon receptors, in contrast to the modest similarity of approximately 40-60% at the danuglipron and orforglipron orthosteric sites.

Our portfolio of discovery-stage incretin receptor agonists includes several potent, selective mono-GIPR agonists, dual-GIPR / GCGR agonists, and triple-GLP-1R / GIPR / GCGR agonists. Cell-based assay data for an exemplar incretin agonist compound for each of these profiles is shown in Figure 16 which demonstrates differential potency and selectivity of these compounds in their ability to activate GIPR, GLP-1R, and GCGR-induced intracellular signaling:

- Mono-GIPR agonist exemplar SP-3561 demonstrated high potency (EC_{50} = 3.1 nM) and was about 60-fold selective relative to GCGR and greater than 10,000-fold selective relative to GLP-1R. Mono-GIPR agonists may have therapeutic potential alone or in combination with GLP-1R agonists.

- Dual-GIPR / GCGR agonist exemplar SP-7606 demonstrated comparable GIPR potency to SP-3561 but with significantly improved GCGR potency (EC50 = 17 nM) and still high selectivity relative to GLP-1R. Dual-GIPR / GCGR agonists may have therapeutic potential alone or in combination with GLP-1R agonists.
- Triple-GLP-1R / GIPR / GCGR agonist exemplar SP-2297 demonstrated comparable GIPR and GCGR potency to SP-7606 but with significantly improved GLP-1R potency (EC50 = 330 nM). Additional optimization efforts are underway to try to further improve GLP-1R potency.

	Mono-GIPR Agonist	Dual-GIPR / GCGR Agonist	Triple-GLP-1R / GIPR / GCGR Agonist
EC_{50}	Example: SP-3561	Example: SP-7606	Example: SP-2297
GIPR	3.1 nM	3.8 nM	2.4 nM
GCGR	190 nM	17 nM	14 nM
GLP-1R	>30,000 nM	16,000 nM	330 nM

Figure 16. Cell-based assay activity of exemplar incretin receptor agonist compounds: cAMP readout in recombinant cells overexpressing GIPR, GLP-1R, or GCGR. EC_{50} = half-maximal effective concentration.

Favorable physicochemical and *in vitro* drug metabolism properties of one of our selective mono-GIPR agonists, SP-3561, translated into promising PK in mice with low clearance and high oral bioavailability. Subsequent evaluation of SP-3561 in an oral-glucose tolerance test (OGTT) in diet-induced obese (DIO) mice (Figure 17.A) demonstrated significant dose-dependent glucose reduction at oral doses of 10 and 30 mg/kg (Figure 17.B,C). DIO mice were fasted overnight, and 30 minutes after oral dosing of SP-3561 a glucose challenge was administered, and blood glucose levels were monitored for two hours after dosing. At 30 mg/kg, SP-3561 demonstrated effective glucose control comparable to retatrutide (clinically studied triple-GLP-1R / GIPR / GCGR injectable peptide agonist) dosed subcutaneously (Figure 17.B,C).

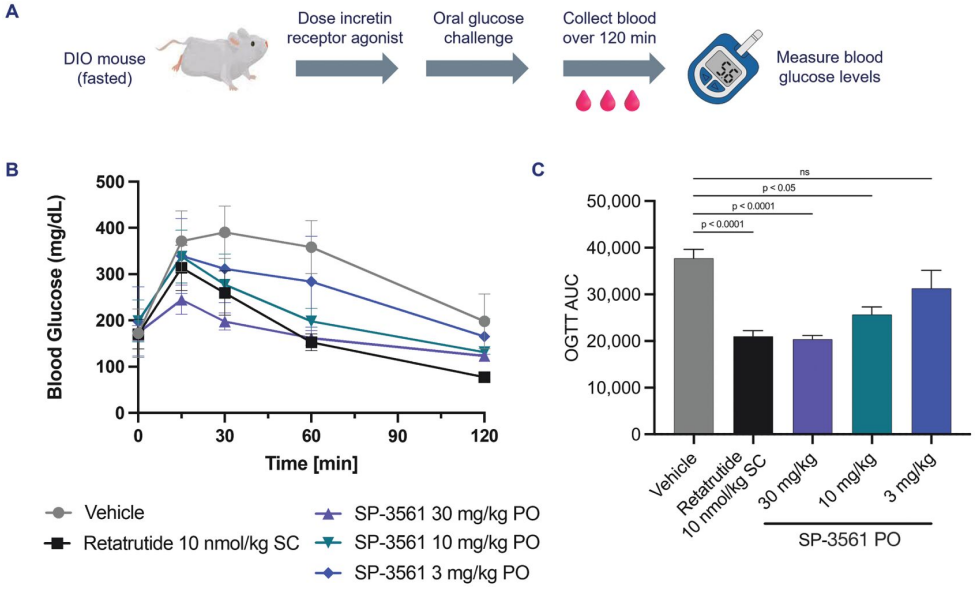


Figure 17. (A) OGTT model with DIO mice. (B,C) SP-3561 improves oral glucose tolerance in the DIO mouse model comparable to retatrutide. PO = oral, SC = subcutaneous.

A second selective mono-GIPR agonist, SP-2991, was studied in a 14-day repeat dosing weight loss study in DIO mice (Figure 18). SP-2991 was evaluated at a once-daily oral dose of 30 mg/kg, alone or in combination with once-daily subcutaneous injections of the GLP-1R agonist peptide semaglutide at 10 nmol/kg. These cohorts were compared with once-daily semaglutide subcutaneous injections at 10 nmol/kg, once-daily subcutaneous injections of the dual GIPR / GLP-1R agonist peptide tirzepatide at 10 nmol/kg, and historical vehicle controls. Body weights of the mice were measured prior to compound dosing on day 0 and on days 1, 4, 6, 8, 10, 12, and 14 when the study was terminated. SP-2991, when dosed alone, resulted in about 7% average body weight loss relative to vehicle controls, which was statistically significant. When added to a subcutaneous daily dose of semaglutide, SP-2991 resulted in about 33% average body weight loss, which was similar in magnitude to what was observed for tirzepatide in the same study and significantly more weight loss relative to dosing of semaglutide alone.

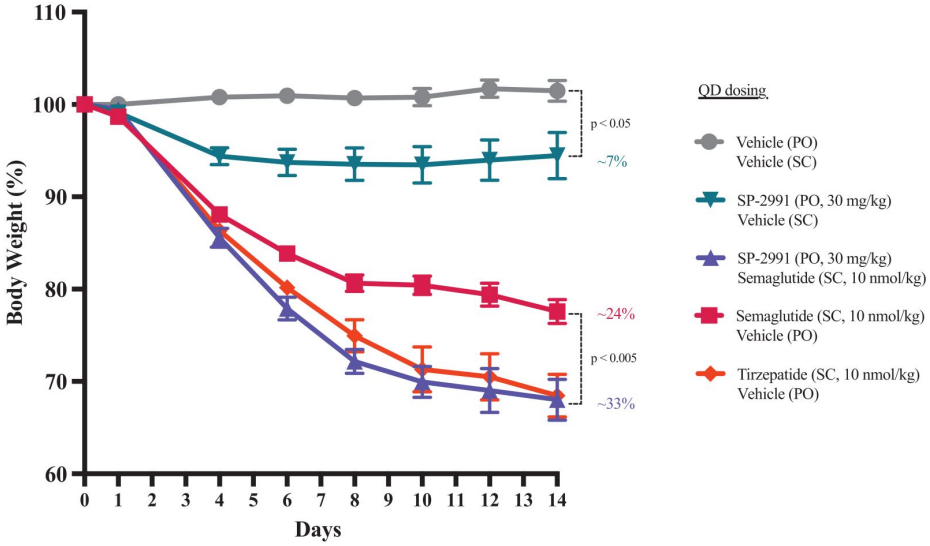


Figure 18. Mono-GIPR agonist, SP-2991, when dosed orally once daily in combination with subcutaneous dosing of the GLP-1R agonist peptide semaglutide, resulted in significant body weight loss in the DIO mouse model, which is comparable in magnitude to subcutaneous dosing of the dual GLP-1R/GIPR agonist peptide tirzepatide. PO = oral, SC = subcutaneous, QD = once daily.

Next Steps

We have identified potent, selective mono-GIPR agonists, dual-GIPR / GCGR agonists, and triple-GLP-1R / GIPR / GCGR agonists. Oral small molecule mono-GIPR agonists with favorable PK properties have demonstrated the ability to achieve glucose control in a mouse model of glucose sensitivity and demonstrated weight loss in a DIO mouse model as a single agent and additive weight loss when dosed in combination with semaglutide. We are continuing to optimize multiple early-stage oral small molecule incretin receptor agonists and plan to continue evaluating them in a variety of metabolic models with a goal of advancing lead compounds towards selection of one or more development candidates for IND-enabling studies.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on proprietary and novel products and product candidates. While we believe our product candidates, platform, knowledge, experience and scientific personnel provide us with several key competitive advantages, we face competition from major pharmaceutical and biotechnology companies,

academic institutions, governmental agencies and public and private research institutions, among others. Our future success will depend in part on our ability to maintain a competitive position with our structure-based drug discovery platform. If we fail to stay at the forefront of technological change in utilizing our platform to create and develop product candidates, we may be unable to compete effectively. Our competitors may render our approach obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and platform. Several other companies also focus on GPCRs and have platform technologies that are distinct from our Native Complex Platform™, including Nxera Pharma (formerly Sosei Heptares), Structure Therapeutics, Tectonic Therapeutics, and Confo Therapeutics.

In addition, any product candidates that we successfully develop and commercialize, including SEP-786 and SEP-631, may compete with existing therapies and new therapies that may become available in the future that are approved to treat the same diseases for which we may obtain approval for our product candidates. There are several large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the indications that we are pursuing. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

We are aware of pharmaceutical companies that have commenced clinical studies of products or have successfully commercialized products addressing areas that we are targeting. Takeda owns the rights to an injectable parathyroid hormone product (brand name NATPARA), for the treatment of hypoparathyroidism. NATPARA was voluntarily recalled in September 2019 in the United States due to manufacturing issues and is now only available to a limited number of patients through a Special Use Program offered by its manufacturer. In October 2022, Takeda announced manufacturing of all strengths of NATPARA will be discontinued globally by the end of 2024. Ascendis Pharma received regulatory approval for a proprietary once-daily injectable PTH peptide, palopegteriparatide (brand name YORVIPATH), in Europe and in the United States. In March 2024, AstraZeneca acquired Amolyt Pharma, who was developing eneboparatide, a proprietary, once-daily injectable PTH peptide, for hypoparathyroidism, currently in Phase 3 trials. In addition, we are aware of several academic groups and companies working on making longer-acting agonists of PTH1R. Other companies and groups are developing or commercializing therapies for hypoparathyroidism, including Calcilytix (a BridgeBio company), Entera Bio, Extend Biosciences, and MBX Biosciences. Several companies are developing clinical-stage small molecule MRGPRX2 inhibitors, including Escient Pharmaceuticals (acquired by Incyte Pharmaceuticals in April 2024), Evommune, and BioArdis. Further there are several other companies pursuing therapies for CSU addressing other receptors of interest, such as Genentech, Sanofi, Celldex Therapeutics, Jasper Therapeutics, Acelyrin, Allakos, Novartis, Third Harmonic Bio, and Blueprint Medicines. For TSHR, we are aware that Byondis and Crinetics are also working on research stage compounds, but they have not yet entered clinical development. In addition several companies are working on other mechanisms to address Graves' disease, such as Immunovant, and TED, including Amgen, Viridian, Argenx, Roche, Lassen Therapeutics, Tourmaline Bio, Sling Therapeutics, and Acelyrin. There are also several currently approved injectable products targeting incretin receptors for the treatment of obesity or T2D. These include, but are not limited to, products such as Ozempic and Wegovy (semaglutide, each marketed by Novo Nordisk) for T2D and obesity, respectively, Trulicity (dulaglutide, marketed by Eli Lilly and Company) for T2D, and Mounjaro and Zepbound (tirzepatide, each marketed by Eli Lilly and Company) for T2D and obesity, respectively. There are also several injectable peptide products in development pursuing similar indications with similar mechanism of actions along with combination products, including those being developed by Amgen, AstraZeneca, Boehringer Ingelheim, Eli Lilly and Company, Novo Nordisk, Roche, and Viking, among others. In addition, there are oral products such as Rybelsus (semaglutide, marketed by Novo Nordisk) approved for patients with T2D and other oral products in development for treating obesity or T2D, including those being developed by AstraZeneca, Eli Lilly and Company, Pfizer, Roche, Structure, and Terns. Based on our continuing evaluations of the competitive landscape, we may decide to reallocate resources and reprioritize our development programs if we determine that a particular product candidate or target indication is no longer commercially viable or advantageous.

Many of our competitors, either alone or with their collaborators, have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the timing and scope of marketing approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, more convenient, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. If we are unable to compete effectively, our opportunity to generate revenue from the sale of our products we may develop, if approved, could be adversely affected.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other applicable regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products. There are generic products currently on the market for certain of the indications that we are pursuing and additional products are expected to become available on a generic basis over the coming years. If our product candidates are approved, we expect that they will be priced at a significant premium over competitive generic products.

Manufacturing and Supply

We do not own or operate manufacturing facilities for the production of our product candidates and currently have no immediate plans to build our own clinical or commercial scale manufacturing capabilities. We have engaged, and expect to continue to rely on, third-party contract manufacturing organizations (CMOs) to supply our product candidates for use in our preclinical studies and clinical trials.

Additionally, we intend to rely on third-party manufacturers for later-stage development and commercial manufacturing if our product candidates receive marketing approval. As our current or future product candidates advance through clinical development, we expect to enter into longer-term commercial supply agreements to fulfill and secure our production needs. While the drug substances used in our product candidates are manufactured by more than one supplier, the number of manufacturers is limited. In the event it is necessary or advisable to acquire supplies from an alternative supplier, we might not be able to obtain them on commercially reasonable terms, if at all. It could also require significant time and expense to redesign our manufacturing processes to work with another company. If we need to change manufacturers during the clinical or development stage for product candidates or after commercialization for our product candidates, if approved, the FDA, European Medicines Agency (EMA), and other comparable foreign regulatory authorities must approve these new manufacturers in advance, which will involve testing and additional inspections to ensure compliance with FDA regulations and standards and may require significant lead times and delay. Reliance on third-party manufacturers and CMOs may expose us to different risks than if we were to manufacture and develop product candidates ourselves. Should any of these manufacturers become unavailable to us for any reason, we believe that there are a number of potential replacements, although we may incur some delay in identifying and qualifying such replacements.

We have personnel with extensive technical, manufacturing, analytical, and quality experience to oversee contract manufacturing and testing activities, and to compile manufacturing and quality information for our regulatory submissions.

Intellectual Property

Our intellectual property is critical to our business and we strive to protect it, including by pursuing and, once obtained, by maintaining patent protection in the United States and in selected foreign jurisdictions for our current and future product candidates, new therapeutic approaches and potential indications, and other inventions that are important to our business. We also rely on the skills, knowledge, and experience of our scientific and technical personnel, as well as that of our advisors, consultants, contractors, and collaborators. To help protect our proprietary know-how that we elect not to patent, such as our proprietary Native Complex Platform™, processes for which patents are difficult to enforce, and any other elements of our current or future product candidates, technology and product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents, we rely on confidentiality and other agreements to protect our interests. We generally require our employees, consultants, scientific advisors and contractors to enter into confidentiality agreements prohibiting the disclosure of our confidential information and requiring disclosure and assignment to us of their ideas, developments, discoveries and inventions important to our business. In addition, we also plan to rely on regulatory protection based on orphan drug exclusivities, data exclusivities, and market exclusivities. See the subsection section titled "—Government Regulation" for additional information.

The patent positions of biotechnology and pharmaceutical companies like us are generally uncertain and can involve complex legal, scientific, and factual issues. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. We also cannot ensure that patents will issue with respect to any patent applications that we may file in the future, nor can we ensure that any of our patents or future patents will be commercially useful in protecting our current or future product candidates and methods of using or manufacturing the same. In addition, the coverage claimed in a patent application may be significantly reduced before a patent is issued, and its scope can be reinterpreted and even challenged after issuance. As a result, we cannot guarantee that any of our current or future product candidates, if they obtain required regulatory approvals, will be protectable or remain protected by enforceable patents. Moreover, any patents that we hold may be challenged, circumvented, or invalidated by third parties.

Our commercial success will also depend in part on our ability to operate without infringing the proprietary intellectual property rights of third parties, and in part on our ability to prevent others from infringing our proprietary rights. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our future drugs or processes, obtain licenses, or cease certain activities. Our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our future drugs may have an adverse impact on us. See "Risk Factors—Risks Related to Intellectual Property" for a more comprehensive description of risks related to our intellectual property.

Patent Applications

We generally file patent applications directed to our current or future product candidates in an effort to secure our intellectual property positions vis-à-vis these programs. For our current or future product candidates, we will, in general, initially pursue patent protection covering compositions of matter and therapeutic methods of use. Throughout the development of our current or future product candidates, we will seek to identify additional means of obtaining patent protection that would potentially enhance commercial success, including by protecting inventions related to additional methods of use, processes of making, formulations and dosing regimens. The intellectual property portfolios for our current product candidates as of September 25, 2024 are summarized below.

Small Molecule Agonists of PTH1R

We own five patent families directed to certain small molecule agonists of PTH1R and therapeutic methods of using them. As of September 25, 2024, we have two pending Patent Cooperation Treaty (PCT) patent

applications, nine pending foreign applications, and three pending United States provisional patent applications. Any patents that may issue from patent applications in these families (or in the case of provisional applications, if issued from future non-provisional applications that we file) are projected to expire between 2043 and 2045, absent any disclaimers or potentially available patent term extensions or adjustments.

Small Molecule Inhibitors of MRGPRX2

We own one patent family directed to certain small molecule inhibitors of MRGPRX2 and therapeutic methods of using them. As of September 25, 2024, we have one pending PCT patent application and seven pending foreign applications. Any patents that may issue from patent applications in this family (or in the case of provisional applications, if issued from future non-provisional applications that we file) are projected to expire in 2044, absent any disclaimers or potentially available patent term extensions or adjustments.

Small Molecule Inhibitors of TSHR

For our TSHR program, we own two patent families directed to certain small molecule inhibitors of TSHR and therapeutic methods of using them. As of September 25, 2024, we have one pending PCT patent application and two pending United States provisional patent application. Any patents that may issue from patent applications in these families (or in the case of provisional applications, if issued from future non-provisional applications that we file) are projected to expire between 2043 and 2045, absent any disclaimers or potentially available patent term extensions or adjustments.

Small Molecule Agonists of Incretin Receptors

For our incretin programs, we own five patent families directed to certain small molecule single- and multi-incretin agonists, of incretin receptors, and therapeutic methods of using them. As of September 25, 2024, we have four pending United States provisional patent applications, one pending foreign application, and one pending PCT application. Any patents that may issue from patent applications in these families (or in the case of provisional applications, if issued from future non-provisional applications that we file) are projected to expire between 2044 and 2045, absent any disclaimers or potentially available patent term extensions or adjustments.

Patent Term Extensions

In the United States, the term of a patent covering an FDA-approved drug may, in certain cases, be eligible for a patent term extension under the Hatch-Waxman Act as compensation for the loss of patent term during the FDA regulatory review process. The period of extension may be up to five years, but cannot extend beyond a total of 14 years from the date of product approval. Only one patent among those eligible for an extension and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. Similar provisions are available in Europe and in certain other jurisdictions to extend the term of a patent that covers an approved drug. If one or more of our pending United States patent applications are issued as United States patents covering our current or future products or their therapeutic use it is possible that the patents may be entitled to patent term extensions. If a therapeutic use of a drug candidate or the drug candidate itself receives FDA approval, we intend to apply for patent term extensions, if available, to extend the term of patents that cover the approved use or drug candidate. We also intend to seek patent term extensions in any other jurisdictions where available. However, there is no guarantee that the applicable authorities, including the FDA, will agree with our assessment of whether such extensions should be granted and even if granted, the length of such extensions.

Trade Secrets & Know-how

In addition to patent protection, we also rely on trade secrets, trademarks, proprietary information, confidential know-how, and continuing technological innovation to develop and maintain our competitive

position. Our trade secrets, proprietary information, and confidential know-how includes our Native Complex Platform™. However, trade secrets, proprietary information, and confidential know-how can be difficult to protect. We seek to protect our trade secrets, proprietary information, and confidential know-how, in part, using confidentiality agreements with any collaborators, scientific advisors, employees, and consultants and invention assignment agreements with our employees. We also have agreements requiring assignment of inventions with selected consultants, scientific advisors, and collaborators. These agreements may not provide adequate protection. These agreements may also be breached, and we may not have an adequate remedy for any such breach. In addition, our trade secrets, proprietary information, and confidential know-how may become known or be independently developed by a third party, or misused by any collaborator to whom we disclose such information. Despite any measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our current or future products or obtain or use information that we regard as proprietary. Although we take steps to protect our proprietary information, third parties may independently develop substantially the same or similar proprietary information and techniques or may otherwise gain access to our proprietary information. As a result, we may not be able to meaningfully protect our trade secrets, proprietary information, and confidential know-how. For more information regarding the risks related to our intellectual property, see the section titled "Risk Factors—Risks Related to Intellectual Property."

Government Regulation

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union (EU), extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the United States

In the United States, the FDA regulates drugs under the U.S. Federal Food, Drug, and Cosmetic Act (FDCA) and its implementing regulations. The failure to comply with applicable U.S. requirements at any time during the product development process, approval process or after approval may subject an applicant and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the U.S. Department of Justice or other governmental entities. In addition, an applicant may need to recall a product.

An applicant seeking approval to market and distribute a new drug product in the United States must typically undertake the following:

- completion of nonclinical, or preclinical, laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice (GLP) regulations;
- submission to the FDA of an IND which must take effect before human clinical trials may begin;
- approval by an institutional review board (IRB) representing each clinical site before each clinical trial may be initiated at that site;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices (GCPs) to establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of an NDA and payment of user fees;

- review of the product by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices (cGMP) requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- FDA review and approval of the NDA; and
- compliance with any post-approval requirements, including risk evaluation and mitigation strategies (REMS) and post-approval studies required by the FDA.

Preclinical Studies

Before an applicant begins testing a compound in humans, the drug candidate enters the preclinical testing stage. Preclinical studies include laboratory evaluation of the purity and stability of the manufactured drug substance or active pharmaceutical ingredient (API) and the formulated drug or drug product, as well as *in vitro* and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. Some long-term preclinical testing, such as animal tests of reproductive adverse effects and carcinogenicity, may continue after the IND is submitted.

The IND and IRB Processes

An IND is an exemption from the FDCA that allows an unapproved drug to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational drug to humans. Such authorization must be secured prior to interstate shipment and administration of the investigational drug. In an IND, applicants must submit a protocol for each clinical trial and any subsequent protocol amendments. In addition, an applicant submits the results of the preclinical tests, manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, to the FDA as part of an IND. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time, the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. The FDA also may impose a clinical hold or partial clinical hold after commencement of a clinical trial under an IND. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, an investigation (or full investigation in the case of a partial clinical hold) may only resume after the FDA has notified the sponsor that the investigation may proceed. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the investigation can proceed.

A sponsor may choose, but is not required, to conduct a foreign clinical trial under an IND. When a foreign clinical trial is conducted under an IND, all FDA IND requirements must be met unless waived. When the foreign clinical trial is not conducted under an IND, the sponsor must ensure that the study is conducted in accordance with GCP, including review and approval by an independent ethics committee (IEC) and informed consent from subjects. The GCP requirements are intended to help ensure the protection of human subjects enrolled in non-IND foreign clinical trials, as well as the quality and integrity of the resulting data. FDA must also be able to validate the data from the study through an on-site inspection if necessary.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and

the IRB must conduct continuing review of the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access that only the group maintains to available data from the study. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health (NIH) for public dissemination on its *ClinicalTrials.gov* website.

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects, or their legal representative, provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- Phase 1. The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine maximal dosage.
- Phase 2. The drug is administered to a limited patient population to identify possible AEs and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- Phase 3. The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product. Post-approval studies, often referred to as Phase 4 studies, may be conducted after initial regulatory approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA. In addition, within 15 calendar days after the sponsor determines that the information qualifies for reporting, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the drug; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Concurrent with clinical trials, companies often complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process

for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the applicant must develop methods for testing the identity, strength, quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

Review of an NDA by the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to a significant application user fee as well as annual prescription drug product program fees. These fees are typically increased annually. Certain exceptions and waivers are available for some of these fees.

The FDA conducts a preliminary review of an NDA within 60 days of its receipt, before accepting the NDA for filing, to determine whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of NDAs. Applications for drugs containing new molecular entities are meant to be reviewed within 10 months from the date of filing, and applications for "priority review" products containing new molecular entities are meant to be reviewed within six months of filing. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

During its review of an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA, including drug component manufacturing (such as APIs), finished drug product manufacturing, and control testing laboratories. The FDA will not approve an NDA unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease, expected benefit of the product, expected duration of treatment, seriousness of known or potential AEs, and whether the product is a new molecular entity. REMS can include medication guides, physician communication plans for healthcare professionals, and elements to assure safe use (ETASU). ETASU may include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The FDA may require a REMS before approval or post-approval if it becomes aware of a serious risk associated with use of the product.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Fast Track, Breakthrough Therapy, and Priority Review

The FDA has a number of programs intended to facilitate and expedite development and review of new drugs if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. Three of these programs are referred to as Fast Track Designation, Breakthrough Therapy Designation, and priority review designation.

Specifically, the FDA may designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's time period goal for reviewing a Fast Track application does not begin until the last section of the application is submitted. In addition, the Fast Track Designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Second, a product may be designated as a Breakthrough Therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to Breakthrough Therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to design the clinical trials in an efficient manner.

Third, the FDA may designate an NDA review for a priority review if it is for a product that treats a serious or life-threatening disease or condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case-by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from 10 months to six months.

Accelerated Approval Pathway

The FDA may grant accelerated approval to a product for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality (IMM), and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Products granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is

not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a product, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a product.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a product, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly.

The accelerated approval pathway is contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the product's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Under the Food and Drug Omnibus Reform Act of 2022 (FDORA), the FDA is permitted to require, as appropriate, that such trials be underway prior to approval or within a specific time period after the date of approval for a product granted accelerated approval. Sponsors are also required to send updates to the FDA every 180 days on the status of such studies, including progress toward enrollment targets, and the FDA must promptly post this information publicly. Under FDORA, the FDA has increased authority for expedited procedures to withdraw approval of a drug or indication approved under accelerated approval if, for example, the sponsor fails to conduct such studies in a timely manner and send the necessary updates to the FDA, or if a confirmatory trial fails to verify the predicted clinical benefit of the product. In addition, the FDA generally requires, unless otherwise informed by the agency, pre-approval of promotional materials for product candidates approved under accelerated regulations, which could adversely impact the timing of the commercial launch of the product.

The FDA's Decision on an NDA

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities and select clinical trial sites, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If a complete response letter is issued, the applicant may resubmit the NDA to address all of the deficiencies identified in the letter, withdraw the application, or request a hearing. If the applicant resubmits the NDA, the FDA will issue an approval letter only when the deficiencies have been addressed to the FDA's satisfaction. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety or effectiveness after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting,

product sampling and distribution, advertising and promotion, reporting of adverse experiences with the product and applicable product tracking and tracing requirements. After approval, many changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are annual prescription drug product program fee requirements for certain marketed products.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the NDA holder and any third-party manufacturers that the NDA holder may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including AEs of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or voluntary product recalls;
- fines, warning or untitled letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act (PDMA), which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Hatch-Waxman Amendments

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product,

or published literature, in support of its application. Section 505(j) establishes an abbreviated approval process for a generic version of approved drug products through the submission of an Abbreviated New Drug Application (ANDA). An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product, known as a reference listed drug (RLD). ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through *in vitro*, *in vivo*, or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug.

Non-Patent Exclusivity

Under the Hatch-Waxman Amendments, the FDA may not approve (or in some cases accept) an ANDA or 505(b)(2) application until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity (NCE). For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, which states the proposed generic drug will not infringe one or more of the already approved product's listed patents or that such patents are invalid or unenforceable, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity for non-NCE drugs if the NDA or a supplement to the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application or supplement. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication, but it generally would not protect the original, unmodified product from generic competition. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting ANDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product; it only prevents FDA from approving such ANDAs.

A drug product can obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods for all formulations, dosage forms, and indications of the active moiety and to patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection and patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study, provided that at the time pediatric exclusivity is granted there is not less than nine months of term remaining.

Hatch-Waxman Patent Certification and the 30-Month Stay

In seeking approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Upon approval, each of the patents listed by the NDA sponsor is published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Upon submission of an ANDA or 505(b)(2) NDA, an applicant is required to certify to the FDA concerning any patents listed for the RLD in the Orange Book that:

- no patent information on the drug product that is the subject of the application has been submitted to the FDA;

- such patent has expired;
- the date on which such patent expires; or
- such patent is invalid, unenforceable or will not be infringed upon by the manufacture, use, or sale of the drug product for which the application is submitted.

Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired. If the ANDA or 505(b)(2) NDA applicant has provided a paragraph IV certification the applicant must send notice of the paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of an ANDA or 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation. If the drug has NCE exclusivity and the ANDA is submitted four years after approval, the 30-month stay is extended so that it expires seven and a half years after approval of the innovator drug, unless the patent expires or there is a decision in the infringement case that is favorable to the ANDA applicant before then.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch-Waxman Amendments, which permits a patent term restoration of up to five years for patent term lost during product development and the FDA regulatory review. The restoration period granted is typically one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the ultimate approval date, provided the sponsor acted with diligence. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved drug product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question and within 60 days of drug approval. A patent that covers multiple drugs for which approval is sought can only be extended in connection with one of the approvals. The U.S. Patent and Trademark Office (USPTO) reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Review and Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, an applicant will need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. Specifically, the process governing approval of medicinal products in the EU generally follows similar lines as in the United States. It entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each

proposed indication. It also requires a submission to the relevant competent authorities of a marketing authorization application (MAA) and granting of a marketing authorization by these authorities before the product can be marketed and sold in the EU.

Clinical Trial Approval

In the EU, an applicant for authorization of a clinical trial must obtain prior approval from the national competent authority of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the relevant independent ethics committee has issued a favorable opinion. In April 2014, the Clinical Trials Regulation, (EU) No 536/2014 (Clinical Trials Regulation) was adopted in the EU. The Clinical Trials Regulation is directly applicable in all the EU Member States and repealed the Clinical Trials Directive 2001/20/EC, as of January 31, 2022.

The Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the EU. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, known as the "Clinical Trials Information System"; a single set of documents to be prepared and submitted for the application, as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by an elected Reference Member State, with support of the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (the Member States concerned). Part II is assessed separately by each Member State concerned. Strict deadlines have been established for the assessment of clinical trial applications. The role of the relevant ethics committees in the assessment procedure continues to be governed by the national laws of the concerned EU Member State, however overall related timelines are defined by the Clinical Trials Regulation.

Marketing Authorization

To obtain a marketing authorization for a product in the EU, an applicant must submit an MAA either under a centralized procedure administered by the European Medicines Agency (EMA) or one of the procedures administered by competent authorities in the EU Member States (decentralized procedure or mutual recognition procedure) for obtaining a marketing authorization in multiple EU Member States. A marketing authorization may be granted only to an applicant established in the European Economic Area (EEA) (which is comprised of the EU Member States plus Norway, Iceland and Liechtenstein).

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid throughout the EEA. Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products (gene therapy, somatic cell therapy and tissue-engineered products) and products with a new active substance indicated for the treatment of certain diseases, including products for the treatment of HIV, AIDS, cancer, diabetes, neurodegenerative diseases, auto-immune and other immune dysfunctions and viral diseases. The centralized procedure is optional for other products containing a new active substance not yet authorized in the EU, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.

Under the centralized procedure, the Committee for Medicinal Products for Human Use (CHMP) established at the EMA is responsible for conducting the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions asked by the CHMP. Clock stops may extend the timeframe of evaluation of an MAA considerably beyond 210 days. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from a public health

perspective and in particular from the point of view of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days, excluding clock stops, but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Within 67 days from the date of the CHMP opinion, the European Commission will adopt its final decision on the MAA.

Now that the United Kingdom (which comprises Great Britain and Northern Ireland) (UK) has left the EU, Great Britain is no longer covered by centralized marketing authorizations (under the Northern Ireland Protocol, centralized marketing authorizations currently continue to be recognized in Northern Ireland). On January 1, 2024, a new international recognition framework was put in place by the Medicines and Healthcare products Regulatory Agency (MHRA), the UK medicines and medical devices regulator, under which the MHRA may have regard to decisions on the approval of marketing authorizations made by the EMA and certain other regulators when determining an application for the grant of a UK or Great Britain marketing authorization. The MHRA also has the power to have regard to marketing authorizations approved in EU Member States through decentralized or mutual recognition procedures with a view to more quickly granting a marketing authorization in the UK or Great Britain. For additional information related to the regulatory framework in the UK, please refer to the discussion below under the section titled "—Brexit and the Regulatory Framework in the United Kingdom."

The decentralized marketing authorization procedure allows an applicant to apply for simultaneous authorization in more than one EU Member State of medicinal products that have not yet been authorized in any EU Member State and that do not fall within the mandatory scope of the centralized procedure. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The Reference Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the Concerned Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a Concerned Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all Member States.

The mutual recognition procedure is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of another EU Member State. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

Pediatric Development

Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the EU, applicants have to demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan (PIP) covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver or (3) a deferral for one or more of the measures included in the PIP. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the product for which a marketing authorization is being sought. Products that are granted a marketing authorization with the results of the pediatric clinical trials conducted in accordance with the PIP are eligible for a six-month extension of the protection under a supplementary protection certificate (SPC), provided an application for such extension is made at the same time as filing the SPC application for the product, or at any point up to two years before the SPC expires, even where the trial results are negative. In the case of orphan medicinal products, a two-year extension of the orphan market exclusivity may be available. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the PIP are developed and submitted.

Data and Market Exclusivity

In the EU, innovative medicinal products approved on the basis of a complete and independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. Data exclusivity prevents applicants for authorization of generics or biosimilars of these innovative products from referencing the innovator's preclinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar (abbreviated) marketing authorization, for a period of eight years from the date on which the reference product was first authorized in the EU. During an additional two-year period of market exclusivity, a generic or biosimilar MAA can be submitted, and the innovator's data may be referenced, but no generic or biosimilar medicinal product can be placed on the EU market until the expiration of the market exclusivity. The overall 10-year period will be extended to a maximum of 11 years if, during the first eight years of those 10 years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. There is no guarantee that a product will be considered by the EMA to be an innovative medicinal product, and products may not qualify for data exclusivity. Even if a product is considered to be an innovative medicinal product so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained a marketing authorization based on an MAA with a complete and independent data package of pharmaceutical tests, preclinical tests and clinical trials.

Orphan Designation and Exclusivity

Regulation (EC) No 141/2000 and Regulation (EC) No. 847/2000 provide that a product can be designated as an orphan medicinal product by the European Commission if its sponsor can establish that: (1) the product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition, (2) either (i) such condition affects no more than five in ten thousand persons in the EU when the application is made, or (ii) without the benefits derived from orphan status, it is unlikely that the marketing of the product in the EU would generate sufficient return to justify the necessary investment in its development and (3) there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the EU or, if such method exists, the product would be of significant benefit to those affected by that condition.

An orphan designation provides a number of benefits, including fee reductions, regulatory assistance and the possibility to apply for a centralized EU marketing authorization. Marketing authorization for an orphan medicinal product leads to a ten-year period of market exclusivity being granted. During this market exclusivity period, the EMA, the European Commission or the competent authorities of the EU Member States may only grant a marketing authorization to a "similar medicinal product" to the authorized orphan product for the same therapeutic indication if: (i) a second applicant can establish that its product, although similar to the authorized orphan product, is safer, more effective or otherwise clinically superior; (ii) the marketing authorization holder for the authorized orphan product consents to a second orphan medicinal product application; or (iii) the marketing authorization holder for the authorized orphan product cannot supply enough orphan medicinal product. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation because, for example, the product is sufficiently profitable not to justify market exclusivity. Orphan designation must be requested before submitting an application for marketing authorization. Orphan designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Periods of Authorization and Renewals

A marketing authorization has an initial validity of five years. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the relevant EU Member State for a nationally authorized product. To this end, the marketing

authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least nine months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authorities of the relevant Member States decide, on justified grounds relating to pharmacovigilance, to proceed with one further five year renewal period. Any authorization which is not followed by the actual placing of the medicinal product on the EU market (for centrally-authorized products) or on the market of the authorizing EU Member State (for nationally-authorized products) within three years after authorization ceases to be valid (the so-called sunset clause).

Regulatory Requirements after a Marketing Authorization has been Obtained

Where an authorization for a medicinal product in the EU is obtained, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. These include:

- Compliance with the EU's stringent pharmacovigilance or safety reporting rules must be ensured. These rules can impose post-authorization studies and additional monitoring obligations.
- The manufacturing of authorized medicinal products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the applicable EU laws, regulations and guidance, including Directive 2001/83/EC, Directive (EU) 2017/1572, Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice. These requirements include compliance with EU cGMP standards when manufacturing medicinal products and APIs, including the manufacture of APIs outside of the EU with the intention to import the APIs into the EU.
- The marketing and promotion of authorized products, including industry-sponsored continuing medical education and advertising directed toward the prescribers of products and/or the general public, are strictly regulated in the EU notably under Directive 2001/83/EC, as amended, and EU Member State laws.

The aforementioned EU rules are generally applicable in the EEA.

Reform of the Regulatory Framework in the European Union

The European Commission introduced legislative proposals in April 2023 that, if implemented, will replace the current regulatory framework in the EU for all medicines (including those for rare diseases and for children). The European Commission has provided the legislative proposals to the European Parliament and the European Council for their review and approval. In April 2024, the European Parliament adopted its position on the legislative proposals. Once the European Commission's legislative proposals are approved (with or without amendment), they will be adopted into EU law.

Brexit and the Regulatory Framework in the United Kingdom

The UK ceased being a Member State of the EU on January 31, 2020, and the EU and the UK have concluded a trade and cooperation agreement (TCA), which was provisionally applicable since January 1, 2021 and has been formally applicable since May 1, 2021. The TCA includes specific provisions concerning pharmaceuticals, which include the mutual recognition of GMP, inspections of manufacturing facilities for medicinal products and GMP documents issued, but does not provide for wholesale mutual recognition of UK and EU pharmaceutical regulations. At present, Great Britain has implemented previous EU legislation on the marketing, promotion and sale of medicinal products through the Human Medicines Regulations 2012 (as amended) (under the Northern Ireland Protocol, the EU regulatory framework continues to apply in Northern Ireland). Except in respect of the EU Clinical Trials Regulation, the regulatory regime in Great Britain therefore aligns in many ways with current EU medicines regulations, however it is possible that these regimes will diverge more significantly in the future now that Great Britain's regulatory system is independent from the EU

and the TCA does not provide for mutual recognition of UK and EU pharmaceutical legislation. However, notwithstanding that there is no wholesale recognition of EU pharmaceutical legislation under the TCA, under a new international recognition framework which was put in place by the MHRA on January 1, 2024, the MHRA may take into account decisions on the approval of marketing authorizations from the EMA (and certain other regulators) when considering an application for a Great Britain or UK marketing authorization.

On February 27, 2023, the UK government and the European Commission announced a political agreement in principle to replace the Northern Ireland Protocol with a new set of arrangements, known as the "Windsor Framework." This new framework fundamentally changes the existing system under the Northern Ireland Protocol, including with respect to the regulation of medicinal products in the UK. In particular, the MHRA will be responsible for approving all medicinal products destined for the UK market (i.e., Great Britain and Northern Ireland), and the EMA will no longer have any role in approving medicinal products destined for Northern Ireland. A single UK-wide marketing authorization will be granted by the MHRA for all medicinal products to be sold in the UK, enabling products to be sold in a single pack and under a single authorization throughout the UK. The Windsor Framework was approved by the EU-UK Joint Committee on March 24, 2023, so the UK government and the EU will enact legislative measures to bring it into law. On June 9, 2023, the MHRA announced that the medicines aspects of the Windsor Framework will apply from January 1, 2025.

Review and Approval of Medicinal Products in Australia

The Therapeutic Goods Administration (TGA) and the National Health and Medical Research Council (NHMRC) set the GCP requirements for clinical research in Australia.

Compliance with the regulations, standards and codes set by the TGA and NHMRC is mandatory. Under the *Therapeutic Goods Act 1989* (Cth) and the *Therapeutic Goods Regulations 1990* (Cth), it is a condition (amongst other conditions) of all clinical trials involving investigational medicinal products to comply with the National Statement on Ethical Conduct in Research Involving Humans, published by the NHMRC (the National Statement), and the Guideline for Good Clinical Practice published by the International Council for Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Guidelines). The ICH Guidelines have been adopted in Australia, and must be complied with across all fields of clinical research involving therapeutic goods, including those related to pharmaceutical quality, nonclinical and clinical data requirements and trial designs. The basic requirements for preclinical data to support a first-in-human trial under ICH Guidelines are applicable in Australia. Requirements related to adverse event reporting in Australia are generally similar to those required in other major jurisdictions (and there is alignement with the European Union's Clinical Trial Regulations: Regulation EU No 536/2014), although reporting timeframes may differ to other jurisdictions.

Clinical trials conducted using "unapproved therapeutic goods" in Australia, being those which have not yet been evaluated by the TGA for quality, safety and efficacy (and including unapproved indications of therapeutic goods which have otherwise been approved for use in Australia) must occur pursuant to either the Clinical Trial Notification Scheme (CTN Scheme) or the Clinical Trial Approval Scheme (CTA Scheme). In each case, the trial is supervised by a Human Research Ethics Committee (HREC), an independent review committee constituted in accordance with the National Statement that ensures the protection of rights, safety and well-being of human subjects involved in a clinical trial. A HREC reviews, approves and provides continuing oversight of trial protocols (including any amendments), methods and materials intended to be used in obtaining and documenting informed consent of the clinical trial subjects.

The CTN Scheme broadly involves:

- the investigator or sponsor of the Australian clinical trial submitting a 'Notification of Intent to Conduct a Clinical Trial' form (CTN Form) to the TGA and payment of the relevant fee (for unapproved medicines, this was AUD 429 at 1 July 2024: *Therapeutic Goods Regulations* 1990, clause 3, Schedule 9, item 14(a));

- the TGA may request further specific information relating to the 'unapproved therapeutic goods' that are the subject of the clinical trial;
- submission to a HREC, of all material relating to the proposed clinical trial, including the trial protocol;
- the HREC reviews the scientific validity of the trial design, the balance of risk versus harm of the therapeutic good, the ethical acceptability of the trial process, and approves the trial protocol. The HREC is also responsible for monitoring the conduct of the trial;
- the institution or organization at which the trial will be conducted, referred to as the "Approving Authority," giving final approval for the conduct of the trial at the site, in terms no less restrictive to those advised by the HREC; and
- ensuring that the CTN form is signed by the sponsor, the principal investigator, the chairman of the HREC and a person responsible from the Approving Authority. The TGA does not review any data relating to the clinical trial, however CTN trials cannot commence until the trial has been notified to the TGA. It is the responsibility of the sponsor to ensure that all relevant approvals are in place before supplying the 'unapproved' therapeutic goods in the clinical trial in Australia.

Under the CTA Scheme:

- a sponsor submits an application to conduct a clinical trial to the TGA for evaluation and comment, which includes payment of the relevant fees (for unapproved medicines, this was AUD 2,046 for a 30-day evaluation and AUD 25,426 for a 50-day evaluation, as at 1 July 2024: *Therapeutic Goods Regulations* 1990, clause 3, Schedule 9, items 1(a) and (b) respectively). The TGA encourages all sponsors to request a pre-submission meeting with the TGA in order to clarify any questions about existing studies or the proposed data package for the CTA application, and obtain specific advice from the TGA relating to the CTA application process, including the best ways to submit the application and dossier;
- the TGA will undertake a preliminary assessment to ensure that there is sufficient data to begin evaluation. If critical data is missing, the TGA may request further information;
- a sponsor must forward any comments made by the TGA Delegate to the HREC(s) at the sites where the trial will be conducted;
- the HREC is responsible for considering the scientific and ethical issues of the proposed trial protocol.

A sponsor cannot commence a trial under the CTA Scheme until written advice has been received from the TGA regarding the application and approval for the conduct of the trial has been obtained from an ethics committee and the institution at which the trial will be conducted.

Approval for inclusion in the Australian Register of Therapeutic Goods (ARTG), is required before a therapeutic good (including pharmaceutical product) may be marketed (or supplied, imported, exported or manufactured) in Australia. Exceptions apply to therapeutic goods/pharmaceutical products that are supplied, imported, and exported to and from Australia for the purposes of a clinical trial, on the basis that certain conditions are met (e.g., the trial is conducted in accordance with the CTN or CTA scheme).

Once a sponsor decides to register a therapeutic good/pharmaceutical product in Australia, in order to obtain registration of the product on the ARTG, it is required that (amongst others):

- the sponsor submits appropriate documentation, including the outcomes of clinical trials and studies, to allow the TGA to assess the quality, safety and efficacy of the therapeutic product/pharmaceutical product; and
- the sponsor submits evidence which demonstrates that the manufacture of the therapeutic product/pharmaceutical product complies with the applicable GMP requirements.

The TGA has the ultimate discretion to decide whether to include the therapeutic product/pharmaceutical product in the ARTG.

Other Healthcare Laws

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment, and exclusion from government healthcare programs;
- federal civil and criminal false claims laws, including the False Claims Act (FCA), which can be enforced through civil "qui tam" or "whistleblower" actions, and civil monetary penalty laws, which impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating these statutes without actual knowledge of the statutes or specific intent to violate them in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), imposes requirements on certain covered healthcare providers, health plans and healthcare clearinghouses as well as their respective business associates and their subcontractors that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- Even when HIPAA/HITECH do not apply, according to the Federal Trade Commission (FTC), failing to take appropriate steps to keep consumers' personal information secure constitutes unfair acts or

practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, 15 U.S.C. § 45(a). The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards;

- the federal Physician Payments Sunshine Act, created under the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the ACA) and its implementing regulations, which requires manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the Department of Health and Human Services (HHS) information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other licensed healthcare professionals (i.e., physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists, and certified nurse midwives), and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- federal government price reporting laws, which require us to calculate and report complex pricing metrics in an accurate and timely manner to government programs;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales, and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; and state and local laws requiring the registration of pharmaceutical sales representatives.

If our operations are found to be in violation of any of such laws or any other governmental regulations that apply, we may be subject to significant penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and responsible individuals may be subject to imprisonment.

Coverage and Reimbursement

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Thus, even if a product candidate is approved, sales of the product will depend, in part, on the extent to which third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations, provide coverage, and establish adequate reimbursement levels for, the product. Factors payors consider in determining coverage and reimbursement are based on whether the product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;

- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the prices charged, examining the medical necessity, and reviewing the cost- effectiveness of medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. Additionally, companies may also need to provide discounts to purchasers, private health plans or government healthcare programs. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover a product could reduce physician utilization once the product is approved and have a material adverse effect on sales, results of operations and financial condition. Additionally, a third-party payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of products have been a focus in this effort. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical products, limiting coverage and the amount of reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price (ASP) and best price. Penalties may apply in some cases when such metrics are not submitted accurately and timely. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. Even if we do receive a favorable coverage determination for approved products by third-party payors, coverage policies and third-party payor reimbursement rates may change at any time.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, the U.S. Centers for Medicare & Medicaid Services (CMS) may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their commercial products, which

has resulted in several U.S. Congressional inquiries and proposed and enacted state and federal legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. Congress has indicated that it will continue to seek new legislative measures to control drug costs.

Outside the United States, ensuring coverage and adequate payment for a product also involves challenges. Pricing of prescription pharmaceuticals is subject to government control in many countries. Pricing negotiations with government authorities can extend well beyond the receipt of regulatory approval for a product and may require a clinical trial that compares the cost-effectiveness of a product to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in commercialization.

In the EU, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, the EU Member States have the option to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for products but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the EU have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage healthcare expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the EU. The downward pressure on healthcare costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU Member States, and parallel trade, i.e., arbitrage between low-priced and high-priced EU Member States, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

Current and Future U.S. Healthcare Reform

In the United States, there have been a number of legislative and regulatory changes to the healthcare system that could impact our ability to sell our products profitably. For example, in March 2010, the ACA was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly affected the pharmaceutical industry. The ACA contained a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement adjustments and changes to fraud and abuse laws. For example, the ACA, among other things:

- increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the average manufacturer price;
- required collection of rebates for drugs paid by Medicaid managed care organizations;
- required manufacturers to participate in a coverage gap discount program, under which they must agree to offer 50 percent point-of-sale discount off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D (later increased to 70%); and
- imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell “branded prescription drugs” to specified federal government programs.

Since its enactment, there have been judicial, administrative, executive, and legislative challenges to certain aspects of the ACA as well as executive orders related to the ACA's implementation. For example, President Biden has issued multiple executive orders that have sought to reduce prescription drug costs. In addition, on June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. It is unclear how other healthcare reform measures of the Biden administrations or other efforts, if any, to challenge repeal or replace the ACA, will impact our business.

There has been increasing legislative and enforcement interest in the United States with respect to drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. For example, the Inflation Reduction Act of 2022 (IRA), among other things, (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare, and subject drug manufacturers to civil monetary penalties and a potential excise tax by offering a price that is not equal to or less than the negotiated "maximum fair price" for such drugs and biologics under the law and (ii) imposes rebates with respect to certain drugs and biologics covered under Medicare Part B or Medicare Part D to penalize price increases that outpace inflation. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. These provisions took effect progressively starting in fiscal year 2023. On August 29, 2023, HHS announced the list of the first ten drugs that will be subject to price negotiations, although the Medicare drug price negotiation program is currently subject to legal challenges. It is unclear how the IRA will be implemented but is likely to have a significant impact on the pharmaceutical industry. Further, on December 7, 2023, the Biden administration announced an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act. On December 8, 2023, the National Institute of Standards and Technology published for comment a Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights which for the first time includes the price of a product as one factor an agency can use when deciding to exercise march-in rights. While march-in rights have not previously been exercised, it is uncertain if that will continue under the new framework.

In 2020, FDA released its implementing regulations regarding section 804 Importation Programs under the Medicare Prescription Drug Improvement and Modernization Act of 2003. These regulations provide guidance for states to build and submit importation plans for certain drugs from Canada. On September 25, 2020, CMS stated drugs imported by states under this rule will not be eligible for federal rebates under Section 1927 of the Social Security Act and manufacturers would not report these drugs for "best price" or Average Manufacturer Price purposes. Since these drugs are not considered covered outpatient drugs, CMS further stated it will not publish a National Average Drug Acquisition Cost for these drugs. On January 5, 2024, the FDA approved Florida's Section 804 Importation Program (SIP) proposal to import certain drugs from Canada for specific state healthcare programs. It is unclear how this program will be implemented, including which drugs will be chosen, and whether it will be subject to legal challenges in the United States or Canada. Other states have also submitted SIP proposals that are pending review by the FDA. Any such approved importation plans, when implemented, may result in lower drug prices for products covered by those programs

Additionally, on December 2, 2020, HHS published a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Medicare Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. The IRA delayed implementation of this rule to January 1, 2032.

Other legislative and regulatory changes have been proposed and adopted in the United States since the ACA was enacted:

- The U.S. Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year, and, due to subsequent legislative amendments to the statute, will remain in effect until 2032.
- The U.S. American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several types of providers.
- The American Rescue Plan Act of 2021 eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, effective January 1, 2024. These laws and regulations may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.
- The IRA also includes several other provisions that may impact our business to varying degrees, including provisions that create a $2,000 out-of-pocket cap for Medicare Part D beneficiaries, and impose new manufacturer financial liability on all drugs in Medicare Part D.

Individual states have also been increasingly active in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional health care authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other health care programs. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services.

Although a number of these and other proposed measures may require authorization through additional legislation to become effective, and the Biden administration may reverse or otherwise change these measures, both the Biden administration and Congress have indicated that they will continue to seek new legislative measures to control drug costs.

Data Protection, Privacy, and Security

In the ordinary course of business, we collect, transmit, store, use, disclose, transfer, maintain and otherwise process sensitive information, including personal data. Accordingly, we are, or may be become, subject to numerous data protection, privacy, and security obligations, including global, federal, state, and local laws, rules, regulations, guidance, industry standards, external and internal privacy and security policies, contractual requirements and other obligations related to data protection, privacy, and security.

These data protection, privacy, and security obligations are evolving and may impose potentially conflicting obligations. Such obligations may include, without limitation, federal health information privacy laws, state information security and data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., the Federal Trade Commission Act). In addition, in the past few years, numerous U.S. states have passed, or are in the process of enacting, comprehensive privacy laws, rules, and regulations that impose certain obligations on covered businesses, and similar laws are being considered in several other states, as well as at the federal level. While these laws exempt some data processed in the context of clinical trials, these developments may further complicate compliance efforts, and are examples of the increasingly stringent and evolving regulatory frameworks related to personal data processing, as more fully discussed in the section titled "Risk Factors" included elsewhere in this prospectus.

Additionally, to the extent we collect personal data from individuals outside of the United States, through clinical trials or otherwise, we are, or may become, subject to foreign data protection, privacy, and security laws, such as the European Union's General Data Protection Regulation (EU GDPR) and the EU GDPR as incorporated into U.K. domestic law post-Brexit (UK GDPR). Such foreign data protection, privacy, and security laws impose significant and complex compliance obligations on entities that are subject to those laws, as more fully discussed in the section titled "Risk Factors" included elsewhere in this prospectus.

Employees and Human Capital Resources

As of June 30, 2024, we had 68 full-time employees, of which 41 have M.D. or Ph.D. degrees. Within our workforce, 52 employees are engaged in research and development and 16 are engaged in business development, finance, legal, and general management and administration. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of equity-based compensation awards in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Facilities

Our corporate headquarters are located in South San Francisco, California, where we lease and occupy approximately 44,819 square feet of combined office, research and laboratory space at 250 East Grand Avenue, South San Francisco, California 94080. The current term of our lease expires in July 2032.

We believe that our existing facilities are adequate for our current needs and for the foreseeable future. To meet the future needs of our business, we may lease additional or alternate space. We believe that suitable additional or substitute space at commercially reasonable terms will be available as needed to accommodate any future expansion of our operations.

Legal Proceedings

From time to time, we may become involved in or be subject to legal proceedings, claims and litigation arising from the ordinary course of business. We are not currently a party to any litigation or legal proceedings that, in the opinion of our management, are probable to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on our business, financial condition, results of operations and prospects because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

The following table sets forth the name, age and position of each of our executive officers and directors as of the date of this prospectus.

Name	Age	Position(s)
Executive Officers and Employee Directors:		
Jeffrey Finer, M.D., Ph.D.	58	Chief Executive Officer, President and Director
Liz Bhatt, M.S., M.B.A.	57	Chief Operating Officer
Jae B. Kim, M.D.	55	Chief Medical Officer
Samira Shaikhly	55	Chief People Officer
Ran Xiao, M.B.A., CFA	50	Interim Chief Financial Officer and Vice President, Finance and Business Operations
Uwe Klein, Ph.D.	60	Senior Vice President, Biological Sciences
Daniel Long, D.Phil.	51	Senior Vice President, Drug Discovery
Non-Employee Directors:		
Jeffrey Tong, Ph.D.(3)	49	Chairman and Director
Abraham Bassan, M.S.(2)(3)	40	Director
Alan Ezekowitz, M.D., D.Phil.(2)	70	Director
Bernard Coulie, M.D., Ph.D., M.B.A.(1)(2)	58	Director
Shalini Sharp, M.B.A.(1)(3)	49	Director
Jake Simson, Ph.D.(1)	39	Director

(1) Member of our compensation committee.
(2) Member of our nominating and corporate governance committee.
(3) Member of our audit committee.

The following is a biographical summary of the experience of our executive officers and directors.

Executive Officers and Employee Directors

Jeffrey Finer, M.D., Ph.D., has served as our President since December 2019, and as Chief Executive Officer and as a member of our board of directors since November 2021. Since 2016, Dr. Finer has served as a Venture Partner at Third Rock Ventures, a healthcare venture firm, where he was involved in the founding and launching of multiple biotech companies. Prior to joining us, Dr. Finer held positions as interim Chief Technology Officer at Ambys Medicines, Inc., a privately held cell and gene therapy company, from 2017 to May 2019, and at Maze Therapeutics, Inc., a small-molecule precision medicine company, from 2016 to June 2019. Earlier in his career, Dr. Finer held numerous research and development leadership positions, including as Director, Drug Discovery Technologies at Cytokinetics, Inc. a small-molecule biopharmaceutical company, from 1998 to 2007, as Vice President, Discovery at Five Prime Therapeutics, Inc. (acquired by Amgen, Inc. (Nasdaq: AMGN)), a protein therapeutics company, from January 2007 to August 2011, and as Vice President, Molecular & Cellular Biology and later as Vice President, Research Technology at Theravance Biopharma, Inc. (Nasdaq: TBPH), a publicly traded biopharmaceutical company focused on multiple therapeutic areas, from 2011 to 2016. Dr. Finer obtained his B.S. in Chemistry and B.S. in Biology from the Massachusetts Institute of Technology and his M.D. and Ph.D. in Biochemistry from Stanford University School of Medicine. Dr. Finer completed residency training in Internal Medicine at Stanford University School of Medicine, and residency training in Ophthalmology at Massachusetts Eye & Ear Infirmary and Harvard Medical School.

We believe that Dr. Finer is qualified to serve on our board of directors based on his extensive experience as a senior executive in the pharmaceutical industry, his drug development expertise, his research work for both medical and academic institutions, his public company experience, as well as his knowledge of our company based on his role as our President and Chief Executive Officer.

Liz Bhatt, M.S., M.B.A., has served as our Chief Operating Officer since June 2022. Prior to joining us, Ms. Bhatt held positions as Chief Business & Strategy Officer at Applied Molecular Transport Inc. (merged with Cyclo Therapeutics, Inc.), a biopharmaceutical company, from September 2019 to May 2022, as Chief Business Officer and later also as Chief Operating Officer of Achaogen, Inc., a publicly held commercial-stage antibiotics company which declared bankruptcy in April 2019, from September 2017 to June 2019, and in various senior management positions at Gilead Sciences, Inc. (Nasdaq: GILD), a publicly traded biopharmaceutical company focused on treatments for viral, cancer and inflammatory disease, including Vice President, Corporate Development, from July 2006 to September 2017. Earlier in her career, Ms. Bhatt held numerous corporate development positions across a range of biotech and pharmaceutical companies, including at Maxygen, Inc. and Eli Lilly and Company. Ms. Bhatt previously served on the board of directors of eFFECTOR Therapeutics, Inc. (f/k/a Locus Walk Acquisition Corporation), a then publicly traded clinical-stage biopharmaceutical company, from October 2020 to June 2024. Ms. Bhatt obtained her B.A. in Chemistry from Pomona College, her M.S. in Biomedical Sciences from the University of California, San Diego and her M.B.A. from the Kellogg School of Management at Northwestern University.

Jae B. Kim, M.D., has served as our Chief Medical Officer since September 2024. Prior to joining us, Dr. Kim served as Chief Medical Officer of Design Therapeutics, Inc. (Nasdaq: DSGN), a publicly traded biotechnology company, where he currently serves as a consultant on clinical development, and Avidity Biosciences, Inc. (Nasdaq: RNA), a publicly traded biopharmaceutical company, from January 2022 to September 2024 and July 2020 to August 2021, respectively. From February 2016 to July 2020, Dr. Kim served as Clinical Research Head, Chair of the Clinical Trial Review Board and Vice President of Clinical Development at Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY), a publicly traded biopharmaceutical company, where he oversaw the development of multiple clinical assets across inborn errors of metabolism, cardiology, neurology and infectious disease. Prior to that, Dr. Kim served in roles of increasing responsibility at MyoKardia, Inc. (acquired by Bristol-Myers Squibb (NYSE: BMY)), a clinical-stage biopharmaceutical company targeting therapies for cardiovascular disease, from November 2014 to January 2016, and at Amgen, Inc. (Nasdaq: AMGN), a publicly traded global biotechnology company, from December 2008 to October 2014. Dr. Kim is a board certified cardiologist, was an NIH-funded Principal Investigator and served on the Faculty of Medicine at Harvard Medical School and the Brigham and Women's Hospital before joining the biotechnology industry. Dr. Kim received his B.A. in Biological Sciences from Cornell University and his M.D. from Cornell University Medical College. He completed his post-doctoral fellowship in Genetics at Harvard Medical School and his clinical training in Cardiovascular Disease at the Brigham and Women's Hospital and Massachusetts General Hospital.

Samira Shaikhly has served as our Chief People Officer since February 2023. Prior to joining us, Ms. Shaikhly was the Chief People Officer at Ambys Medicines, Inc. (the IP of which was later acquired by Cytotheryx, Inc.) (Ambys Medicines), a privately held cell and gene therapy company, from April 2022 to November 2022, where she led the People & Culture function as the company evolved from a research-focused to a development-focused organization. Prior to Ambys Medicines, Ms. Shaikhly held various roles of increasing responsibility, including Global Head of Human Resources, Corporate Functions Business Partners, at Gilead Sciences, Inc. (Nasdaq: GILD), a publicly traded biopharmaceutical company focused on treatments for viral, cancer and inflammatory disease, from September 2006 to September 2021, where she was responsible for all general and administrative human resources functions. Earlier in her career, Ms. Shaikhly held human resource roles in the technology and retail sectors. Ms. Shaikhly obtained her B.A. in Communication Arts from the University of San Francisco and is a certified Executive Coach from New Ventures West.

Ran Xiao, M.B.A., CFA, has served as our Interim Chief Financial Officer since October 2024 and has served as our Vice President of Finance and Business Operations beginning March 2022. Prior to joining us, from January 2018 to March 2022, Ms. Xiao served as the Vice President of Finance and Corporate Controller at Ambys Medicines, Inc. (the IP of which was later acquired by Cytotheryx, Inc.) (Ambys Medicines), a privately held cell and gene therapy company. Before joining Ambys Medicines, from August 2015 to December 2017, Ms. Xiao served as the Corporate Controller at Corvus Pharmaceuticals, Inc. (Nasdaq: CRVS), a publicly traded

clinical stage biopharmaceutical company, where she played a key role in the company's initial public offering. Previously, from August 2012 to December 2014, Ms. Xiao served in roles of increasing responsibility at InterMune, Inc. (acquired by Roche Holding AG), a privately held biotechnology company, most recently as the Senior Director of Business Process, and was part of the team responsible for accounting operations, financial planning, system implementation and business acquisition. Ms. Xiao received her B.A. in Accounting from Shanghai University of Finance and Economics and her M.B.A. from the Illinois Institute of Technology. Ms. Xiao holds the Chartered Financial Analyst designation from the CFA Institute.

Uwe Klein, Ph.D., has served as our Senior Vice President, Biological Sciences since August 2021. Dr. Klein has over 25 years of experience in small molecule drug discovery and deep expertise in GPCR biology. Prior to joining us, Dr. Klein was Vice President, Biology at MyoKardia, Inc. (acquired by Bristol-Myers Squibb (NYSE: BMY) (BMS)), a clinical-stage biopharmaceutical company targeting therapies for cardiovascular disease, from October 2019 to November 2020, and then Vice President, Biology at BMS following the acquisition, from November 2020 to March 2021. Earlier in his career, Dr. Klein held positions as Vice President, Biology at Numerate, Inc. (acquired by Valo Health, Inc.), a privately-held dug discovery company applying novel machine learning algorithms to drug design, from October 2014 to September 2019, and as Senior Director, Molecular & Cellular Biology at Theravance, from September 1998 to October 2014. Dr. Klein obtained his B.S. and M.S. in Chemistry, and his Ph.D. in Biochemistry, from Goethe University Frankfurt, Germany. He also earned a certificate in Bioinformatics at the University of California, Santa Cruz, and completed his post-doctoral fellowships in Molecular & Cellular Biology from University of California, San Francisco and Stanford University.

Daniel Long, D.Phil., has served as our Senior Vice President, Drug Discovery since December 2021. Prior to joining us, Dr. Long spent over 20 years, from January 2001 to December 2021, at Theravance Biopharma, Inc. (Nasdaq: TBPH), a publicly traded biopharmaceutical company focused on chronic obstructive pulmonary disease treatments, where he held numerous scientist positions, including as Vice President, Head of Medicinal Chemistry, Biology and Pharmacology. Dr. Long obtained his B.A., M.A. and D. Phil. in Chemistry from the University of Oxford and completed an industrial post-doctoral fellowship at DuPont Pharmaceuticals.

Non-Employee Directors

Jeffrey Tong, Ph.D., has served as a member of our board of directors since December 2019, as Chairman of our board of directors since November 2021, and previously served as our interim Chief Executive Officer from December 2019 to November 2021. From December 2021 to October 2023, he was interim Chief Executive Officer of Marea Therapeutics, Inc., a privately held biotechnology company. Dr. Tong is currently a Partner at Third Rock Ventures, where he has worked since May 2016. Earlier in his career, Dr. Tong served as the Executive Chairman of the board of directors of Delinia, Inc. (acquired by Celgene Corporation) and President and Chief Executive Officer of Nora Therapeutics, Inc., each a privately held biotechnology company. Prior to that, Dr. Tong was VP of Corporate and Product Development at Infinity Pharmaceuticals, Inc., held a position at McKinsey & Co., and was a founding researcher at the Harvard Bauer Center for Genomics Research. Dr. Tong has served as a member of the board of directors of Rapport Therapeutics, Inc. (Nasdaq: RAPP), a publicly traded precision small molecule biopharmaceutical company, since December 2022, as well as on the boards of directors of numerous privately held biotechnology companies. Dr. Tong previously served on the board of directors of Nurix Therapeutics, Inc. (Nasdaq: NRIX), from February 2018 to May 2022. Dr. Tong obtained his A.B. in Biochemical Sciences from Harvard University, his A.M. and Ph.D. in Chemistry from Harvard Graduate School of Arts and Sciences and his M.M.S. from Harvard Medical School.

We believe that Dr. Tong is qualified to serve on our board of directors based on his significant experience building and leading successful biotechnology companies and his scientific expertise.

Abraham Bassan, M.S., has served as a member of our board of directors since November 2021. Since April 2021, Mr. Bassan has served as a Principal at Samsara, a privately held life science investment firm, where

he served as a Vice President from July 2017 to April 2021. Since May 2022, Mr. Bassan has served as the interim CEO, President and a Director at Link Cell Therapies Inc., a privately held biotechnology company. From February 2021 to May 2022, Mr. Bassan served as President of Cargo Therapeutics, Inc. (Nasdaq: CRGX), a then privately held clinical-stage cell therapies company (Cargo Therapeutics). Prior to that, from December 2014 to July 2017, Mr. Bassan served as Director of Program Biology at Revolution Medicines, Inc. (Nasdaq: RVMD), a then privately held oncology company. Prior to that, from September 2012 to September 2014, Mr. Bassan served as the founder and Chief Executive Officer of Aurora Medical, Inc., a privately held molecular diagnostics testing services company. From 2010 to 2012, Mr. Bassan served as an Associate Director of Program Management at bluebird bio, Inc. (Nasdaq: BLUE) (bluebird bio), a then privately held biotechnology company, where he was the Project Manager for several of the company's gene therapy programs. Earlier in his career, Mr. Bassan was an Associate at Third Rock Ventures, where he played a leading role in the firm's investment in bluebird bio, as well as the ideation of Blueprint Medicines Corporation (Nasdaq: BPMC), a publicly traded precision medicine oncology company. Mr. Bassan currently serves on the board of directors of Cargo Therapeutics. Mr. Bassan previously served on the board of directors of Graphite Bio, Inc. (merged with LENZ Therapeutics, Inc. (Nasdaq: LENZ)), from June 2020 to March 2024, and on the boards of directors of numerous privately held biotechnology companies. Mr. Bassan obtained his B.A. in Molecular Biology from Princeton University and his M.S. in Developmental Biology from Stanford University.

We believe that Mr. Bassan is qualified to serve as a member of our board of directors because of his education and experience in the life sciences and oncology fields, venture capital experience, as well as his service on the boards of directors of numerous companies.

Alan Ezekowitz, M.D., D.Phil., has served as a member of our board of directors since December 2022, and previously served as our interim Chief Medical Officer from January 2022 to September 2024. Dr. Ezekowitz has served as an Advisory Partner at Third Rock Ventures, a leading biotech venture and company-formation fund, since January 2023, and was previously a Venture Partner at Third Rock Ventures from December 2019 to December 2022. Previously, from November 2011 to June 2019, Dr. Ezekowitz served as the President and Chief Executive Officer of Abide Therapeutics, Inc., a privately held biopharmaceutical company that he co-founded, which he oversaw through its acquisition by H. Lundbeck A/S in 2019. Earlier in his career, from March 2006 to March 2011, Dr. Ezekowitz was the Senior Vice President and Franchise Head at Merck Research Laboratories (Merck), a healthcare company, where he was responsible for the bone, respiratory, immunology, inflammation, dermatology, and endocrine franchises. Prior to joining Merck, Dr. Ezekowitz served at the Harvard Medical School as the Charles Wilder Professor of Pediatrics from June 1995 to March 2005, as the Head of Laboratory for Development Immunology and Principal of the Cancer Center and later as Chief of Pediatric Services at the Massachusetts General Hospital for Children from June 1995 to April 2006, and as a director of the Partners Healthcare System from 2000 to 2006. Dr. Ezekowitz currently serves as a member of the boards of directors of Fulcrum Therapeutics, Inc. (Nasdaq: FULC), a publicly traded small molecule drug discovery company, and Organon & Co., a global healthcare company. Dr. Ezekowitz was honored in 2008 with the establishment of the R. Alan B. Ezekowitz Professorship in Pediatrics at Harvard Medical School. He was the Principal Investigator of an NIH Program Project Grant that included Jules Hoffman, Charles Janeway and Fotis Kafatos who led to the discovery of the TOLL receptors and contributed greatly to the understanding of the field of the innate immunity. Dr. Ezekowitz obtained his M.D. from the University of Cape Town in South Africa and his D.Phil. in Cellular and Molecular Biology from the University of Oxford.

We believe Dr. Ezekowitz is qualified to serve on our board of directors because of his considerable qualifications, attributes and skills, including his distinguished scientific background, experience in leadership roles in the biopharmaceutical industry, venture capital experience as well as his service on the boards of directors of numerous companies.

Bernard Coulie, M.D., Ph.D., M.B.A., has served as a member of our board of directors since December 2023. Dr. Coulie has served as the President, Chief Executive Officer and a member of the board of directors of Pliant Therapeutics, Inc. (Nasdaq: PLRX) (Pliant), a publicly traded late-stage biopharmaceutical company, since

February 2016. Prior to joining Pliant, Dr. Coulie co-founded ActoGeniX N.V. (ActoGeniX), a biopharmaceutical company, and held roles of increasing responsibility, including as Vice President R&D, Chief Medical Officer, and Chief Executive Officer, from September 2006 until February 2015, when it was acquired by Intrexon Corporation. Prior to co-founding ActoGeniX, Dr. Coulie held various positions with increasing responsibility in drug discovery and clinical development at Johnson & Johnson Pharmaceutical Research and Development Europe. Earlier in his career, Dr. Coulie was a Staff Physician in the Department of Gastroenterology and Hepatology at Mayo Clinic, Assistant Professor in Medicine at Mayo Medical School and a Mayo Foundation scholar. Dr. Coulie is currently serving as a director and chairman of Dualyx N.V., a privately held biotechnology company based in Belgium, and as a member of the board of directors of Charcot- Marie-Tooth Association, a non-profit patient advocacy organization dedicated to the development of new drugs to treat Charcot-Marie-Tooth disease. Dr. Coulie previously served as a director of SQZ Biotechnologies Company (acquired by STEMCELL Technologies Canada Acquisitions, Inc.) from July 2021 to March 2024, Calypso Biotech B.V. (acquired by Novartis AG (NYSE: NVS)) from February 2019 to January 2024, Myoscience, Inc. (acquired by Pacira BioSciences, Inc.) from June 2016 until March 2019, Biogazelle N.V. (acquired by CellCarta Biosciences Inc.) from July 2015 until November 2018, and ActoGeniX (acquired by Intrexon Corporation) from April 2010 until February 2015. Dr. Coulie is a board-certified internist and received his M.D. and Ph.D. from the University of Leuven, Belgium and his M.B.A. from the Vlerick Business School, Leuven, Belgium.

We believe Dr. Coulie is qualified to serve on our board of directors because of his extensive experience and expertise in operations management and executive leadership at various biopharmaceutical companies, as well as his service on the boards of directors of numerous companies.

Shalini Sharp, M.B.A., has served as a member of our board of directors since January 2024. Prior to joining us, Ms. Sharp served as Executive Vice President and Chief Financial Officer of Ultragenyx Pharmaceuticals Inc. (Nasdaq: RARE), a publicly traded biopharmaceutical company, from May 2012 to October 2020. Previously, from August 2003 to May 2012, Ms. Sharp held positions of increasing responsibility at Agenus, Inc. (Nasdaq: AGEN), a publicly traded clinical-stage immune-oncology company, including as Chief Financial Officer, and also served as a member of its board of directors from May 2012 to June 2018. Earlier in her career, Ms. Sharp worked at Elan Pharmaceuticals, McKinsey & Company, and Goldman Sachs. Ms. Sharp currently serves on the boards of directors of Beigene, Ltd. (Nasdaq: BGNE), a publicly traded oncology company, Neurocrine Biosciences, Inc. (Nasdaq: NBIX), a publicly traded biopharmaceutical company, and Organon & Co (Nasdaq: OGN), a publicly traded healthcare company. Ms. Sharp previously served on the board of directors of Mirati Therapeutics, Inc. (acquired by Bristol-Myers Squibb Company), a then publicly traded commercial-stage oncology company, from March 2021 to January 2024, Sutro Biopharma, Inc. (Nasdaq: STRO), a publicly traded biopharmaceutical company, from November 2018 to November 2023, Precision BioSciences, Inc. (Nasdaq: DTIL), a publicly traded gene editing company, from December 2018 to June 2022 and Panacea Acquisition Corp. (Nasdaq: PANA), a special purpose acquisition company, from June 2020 until the completion of its business combination in February 2021. Ms. Sharp obtained her B.A. in English and American Literature and Languages from Harvard College and her M.B.A. from Harvard Business School.

We believe Ms. Sharp is qualified to serve on our board of directors because of her extensive experience and expertise in financial management and executive leadership at various biopharmaceutical companies, as well as her service on the boards of directors of numerous companies.

Jake Simson, Ph.D., has served as a member of our board of directors since June 2023. Dr. Simson has served as a Partner at RA Capital, a multi-stage life sciences investment firm, since December 2020. From July 2013 to December 2020, Dr. Simson served as an Associate, Analyst and then a Principal at RA Capital. Dr. Simson currently serves on the boards of directors of Bicara Therapeutics Inc. (Nasdaq: BCAX), a publicly traded biopharmaceutical company, Janux Therapeutics, Inc. (Nasdaq: JANX), a publicly traded immunotherapy company, and Tyra Biosciences, Inc. (Nasdaq: TYRA), a publicly traded precision medicine company, as well as on the boards of directors of numerous privately-held biotechnology companies. Dr. Simson previously served on

the board of directors of Dice Therapeutics, Inc. (Nasdaq: DICE), a publicly traded biopharmaceutical company, from December 2020 until August 2023, when it was acquired by Eli Lilly and Company. Dr. Simson obtained his S.B. in Materials Science and Engineering from the Massachusetts Institute of Technology and his Ph.D. in Biomedical Engineering from Johns Hopkins University.

We believe that Dr. Simson is qualified to serve on our board of directors because of his significant industry experience as an investor in the biopharmaceutical industry and educational background.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Board Composition

Our board of directors currently consists of seven members, each of whom is a member pursuant to the board composition provisions of our current certificate of incorporation and agreements with our stockholders, which agreements are described in the section titled "Certain Relationships and Related Party Transactions." These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and our amended and restated bylaws, which will become effective upon the effectiveness of our registration statement of which this prospectus forms a part, also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Staggered Board

In accordance with the terms of our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and our amended and restated bylaws, which will be effective upon the effectiveness of the registration statement of which this prospectus forms a part, our board of directors will be divided into three staggered classes of directors and each director will be assigned to one of the three classes. At each annual meeting of the stockholders, one class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2025 for Class I directors, 2026 for Class II directors and 2027 for Class III directors.

- Our Class I directors will be Abraham Bassan, M.S. and Alan Ezekowitz, M.D., D.Phil;
- Our Class II directors will be Jake Simson, Ph. D. and Shalini Sharp, M.B.A.; and
- Our Class III directors will be Jeffrey Finer, M.D., Ph.D., Bernard Coulie, M.D., Ph.D., M.B.A., and Jeffrey Tong, Ph.D.

Our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and our amended and restated bylaws, which will be effective upon the effectiveness of the registration statement of which this prospectus forms a part, will provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Director Independence

We have applied to list our common stock on the Nasdaq Global Market. Under the Nasdaq listing rules, independent directors must comprise a majority of a listed company's board of directors within one year from the date of listing. In addition, the Nasdaq listing rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent within one year from the date of listing. Audit committee members must also satisfy additional independence criteria, including those set forth in Rule 10A-3 under the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under Nasdaq listing rules, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (i) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries, other than compensation for board service; or (ii) be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board of directors must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director, and whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In connection with this offering, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that all members of our board of directors, except Dr. Finer, Dr. Ezekowitz, and Dr. Tong, are independent directors, including for purposes of Nasdaq and the SEC rules. In making that determination, our board of directors considered the current and prior relationships that each director has with us and all other facts and circumstances our board of directors deemed relevant in determining independence, including the potential deemed beneficial ownership of our capital stock by each director, non-employee directors that are affiliated with certain of our major stockholders, and the transactions described in the section titled "Certain Relationships and Related Person Transactions."

We have adopted a policy, subject to and effective upon the effectiveness of the registration statement of which this prospectus forms a part, that outlines a process for our securityholders to send communications to our board of directors.

Board Diversity Policies

We have adopted policies and procedures for director candidates for our nominating and corporate governance committee, subject to and effective upon the effectiveness of the registration statement of which this prospectus forms a part, which will provide that the value of diversity should be considered in determining director candidates, as well as other factors, such as a candidate's character, judgment, skills, education, expertise, and absence of conflicts of interest. Our priority in selection of board members will be identification of members who will further the interests of our stockholders through their established records of professional accomplishment, their ability to contribute positively to the collaborative culture among board members, and their knowledge of our business and understanding of the competitive landscape in which we operate and

adherence to high ethical standards. Our nominating and corporate governance committee and our full board of directors are committed to creating a board of directors with diversity, including diversity of expertise, experience, background, and gender, and are committed to identifying, recruiting, and advancing candidates offering such diversity in future searches.

Board Leadership Structure and Board's Role in Risk Oversight

Currently, the role of chairman of our board of directors is separated from the role of Chief Executive Officer. We believe that separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing the chairman to lead our board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as our board of directors' oversight responsibilities continue to grow. While our amended and restated bylaws and corporate governance guidelines do not require that our chairman and Chief Executive Officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction, and intellectual property as more fully discussed in the section titled "Risk Factors." Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of our board of directors in overseeing the management of our risks is conducted primarily through committees of our board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. Our full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables our board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will operate pursuant to a charter that has been adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus forms a part. We believe that the composition and functioning of all of our committees will comply with the applicable requirements of Nasdaq, the Sarbanes-Oxley Act and SEC rules and regulations that will be applicable to us. We intend to comply with future requirements to the extent they become applicable to us.

Following the completion of this offering, the full text of our audit committee charter, compensation committee charter and nominating and corporate governance committee charter will be posted on our website at *www.septerna.com*. We do not incorporate the information contained on, or accessible through, our corporate website into this prospectus, and you should not consider it a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. Our board of directors may establish other committees as it deems necessary or appropriate from time to time.

Audit Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, our audit committee will consist of Shalini Sharp, M.B.A., Abraham Bassan, M.S., and Jeffrey Tong, Ph.D. and will be chaired by Ms. Sharp. The functions of our audit committee will include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon our audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing our audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related party transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

All members of our audit committee will meet the requirements for financial literacy under the applicable rules and regulations of the SEC and the Nasdaq listing rules. Our board of directors has determined that Ms. Sharp qualifies as an "audit committee financial expert" within the meaning of applicable SEC regulations. In making this determination, our board of directors considered the nature and scope of experience that Ms. Sharp has previously had with public reporting companies, including her service as Chief Financial Officer of Ultragenyx Pharmaceuticals Inc. Our board of directors has determined that Ms. Sharp and Mr. Bassan each satisfies the relevant independence requirements for service on our audit committee set forth in the rules of the SEC and the Nasdaq listing rules. We are relying on the phase-in exemption provided under Rule 10A-3 of the Exchange Act and the Nasdaq listing rules with respect to the composition of our audit committee. Dr. Tong is an affiliate of Third Rock Ventures and may be deemed to beneficially own in excess of 10% of our common stock, as of the date of this prospectus, which would leave him outside the safe harbor provision of Rule 10A-3 of the Exchange Act. Dr. Tong will serve on our audit committee under the phase-in exemption referenced above. In accordance with the phase-in exemption, a majority of the members of our audit committee will satisfy the independence standards under the Exchange Act and the Nasdaq listing rules within 90 days of the date of effectiveness of the registration statement of which this prospectus forms a part and all members of our audit committee will satisfy the independence standards under the Exchange Act and the Nasdaq listing rules within one year from the date of listing. Both our independent registered public accounting firm and management will periodically meet privately with our audit committee.

Compensation Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, our compensation committee will consist of Bernard Coulie, M.D., Ph.D., M.B.A., Shalini Sharp, M.B.A., and Jake Simson, Ph.D. and will be chaired by Dr. Coulie. The functions of our compensation committee will include:

- reviewing and recommending to our board of directors the corporate goals and objectives relevant to the compensation of our Chief Executive Officer;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and based on such evaluation reviewing and recommending our Chief Executive Officer's compensation to our board of directors;
- reviewing and approving the compensation of all employees serving at or above the level of Senior Vice President;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq listing rules;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and recommending to our board of directors the compensation of our directors;
- preparing our compensation committee report if and when required by SEC rules;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention or termination of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Each member of our compensation committee will be a non-employee director, as defined in Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended (Code).

Nominating and Corporate Governance Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, our nominating and corporate governance committee will consist of Abraham Bassan, M.S., Bernard Coulie, M.D., Ph.D., M.B.A., and Alan Ezekowitz, M.D., D.Phil. and will be chaired by Mr. Bassan. Our board of directors has determined that each member of our nominating and corporate governance committee, except for Dr. Ezekowitz, is independent under the Nasdaq listing rules, a non-employee director, and free from any relationship that would interfere with the exercise of his or her independent judgment. Dr. Ezekowitz, by virtue of his former position as our interim Chief Medical Officer, is not independent under applicable rules and regulations of the SEC and the Nasdaq listing rules. We are relying on the phase-in exemption provided under Rule 10A-3 of the Exchange Act and the Nasdaq listing rules with respect to the composition of our nominating and corporate governance committee. Dr. Ezekowitz will serve on our nominating and corporate governance committee under the phase-in exemption referenced above. In accordance with the phase-in exemption, a majority of the members of our nominating and corporate governance committee will satisfy the independence standards under the Exchange Act and the Nasdaq listing rules within 90 days of the date of effectiveness of the registration statement of which this prospectus forms a part and all members of our nominating and corporate governance committee will satisfy the independence standards under the Exchange Act and the Nasdaq listing rules within one year from the date of listing. The functions of our nominating and corporate governance committee will include:

- developing and recommending to our board of directors criteria for board and committee membership;

- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of its committees;
- developing and recommending to our board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of our board of directors and management.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is, or has at any time during the prior three years been, one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Code of Business Conduct and Ethics

In connection with this offering, our board of directors has adopted, subject to and effective upon the effectiveness of the registration statement of which this prospectus forms a part, a written code of business conduct and ethics. The code of business conduct and ethics will apply to all of our directors, officers and employees (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions). Upon the completion of this offering, the full text of our code of business conduct and ethics will be posted on our website at *www.septerna.com*.

We intend to disclose on our website any future amendments of our code of business conduct and ethics or waivers that exempt any principal executive officer, principal financial officer, principal accounting officer or controller, persons performing similar functions, or our directors from provisions in the code of business conduct and ethics. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Compensation Recovery

In connection with this offering, our board of directors has adopted, subject to and effective upon the effectiveness of the registration statement of which this prospectus forms a part, a compensation recovery policy that is compliant with the Nasdaq listing rules, as required by the Dodd-Frank Act. The compensation recovery policy will provide that in the event we are required to prepare a restatement of financial statements due to material noncompliance with any financial reporting requirement under securities laws, we will seek to recover any incentive-based compensation that was based upon the attainment of a financial reporting measure and that was received by any current or former executive officer during the three-year period preceding the date that the restatement was required if such compensation exceeds the amount that the executive officers would have received based on the restated financial statements.

Limitations on Liability and Indemnification Agreements

As permitted by Delaware law, provisions in our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and our amended and restated bylaws, which will be effective upon the effectiveness of the registration statement of which this prospectus forms a part, limit or eliminate the personal liability of directors and officers for a breach of their fiduciary duty of care as a

director or officer. The duty of care generally requires that, when acting on behalf of the corporation, a director and or officer exercise an informed business judgment based on all material information reasonably available to him or her. Consequently, a director or officer will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director or officer, except for liability for:

- any breach of the director's or officer's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- for our directors, unlawful payments of dividends or unlawful stock repurchases, or redemptions as provided in Section 174 of the Delaware General Corporation Law (DGCL);
- for our officers, any derivative action by or in the right of the corporation; or
- any transaction from which the director or officer derived an improper personal benefit.

These limitations of liability do not limit or eliminate our rights or any stockholder's rights to seek non- monetary relief, such as injunctive relief or rescission. These provisions will not alter a director or officer's liability under other laws, such as the federal securities laws or other state or federal laws. Our amended and restated certificate of incorporation that will become effective immediately prior to the completion of this offering also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Delaware law, our amended and restated bylaws, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, will provide that:

- we will indemnify our directors, officers, employees and other agents to the fullest extent permitted by law;
- we must advance expenses to our directors and officers, and may advance expenses to our employees and other agents, in connection with a legal proceeding to the fullest extent permitted by law; and
- the rights provided in our amended and restated bylaws are not exclusive.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director or officer, then the liability of our directors or officers will be so eliminated or limited to the fullest extent permitted by Delaware law, as so amended. Our amended and restated bylaws will also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in connection with their services to us, regardless of whether our amended and restated bylaws permit such indemnification. We have obtained such insurance.

In addition to the indemnification that will be provided for in our amended and restated certificate of incorporation and amended and restated bylaws, we plan to enter into separate indemnification agreements with each of our directors and executive officers, which may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements may require us, among other things, to indemnify our directors and executive officers for some expenses, including attorneys' fees, expenses, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of his service as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

This description of the indemnification provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and our indemnification agreements is qualified in its entirety by reference to these documents, each of which is attached as an exhibit to the registration statement of which this prospectus forms a part.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable.

There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

EXECUTIVE COMPENSATION

The following discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding our future compensation programs. The actual amount and form of compensation and the compensation policies and practices that we adopt in the future may differ materially from currently planned programs as summarized in this discussion.

As an emerging growth company, we have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies," as such term is defined in the rules promulgated under the Exchange Act. The compensation provided to our named executive officers (NEOs) for the fiscal year ended December 31, 2023 is detailed in the "*2023 Summary Compensation Table*" and accompanying footnotes and narrative that follow. Our NEOs for the fiscal year ended December 31, 2023 consist of our Chief Executive Officer and the two most highly compensated executive officers (other than our Chief Executive Officer) who were serving as our executive officers on December 31, 2023. In addition, while we are required to disclose a total of three NEOs, we are voluntarily including two additional NEOs, Drs. Long and Klein, given their roles with the Company during the fiscal year ended December 31, 2023. Accordingly, our NEOs for the fiscal year ended December 31, 2023 are:

- Jeffrey Finer, M.D., Ph.D., our President and Chief Executive Officer;
- Liz Bhatt, M.S., M.B.A., our Chief Operating Officer;
- Samira Shaikhly, our Chief People Officer;
- Daniel Long, D.Phil., our Senior Vice President, Drug Discovery; and
- Uwe Klein, Ph.D., our Senior Vice President, Biological Sciences.

To date, the compensation of our NEOs has consisted of a combination of base salary, cash bonuses and long-term incentive compensation in the form of restricted stock awards and stock options. Our NEOs who are full-time employees are eligible to participate in our health and welfare benefit plans and 401(k) plan like all of our full-time employees. As we transition from a private company to a publicly traded company, we intend to evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require.

2023 Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by, and/or paid to our NEOs for services rendered to us in all capacities during the fiscal year ended December 31, 2023.

Name and Principal Position	Year	Salary($)	Bonus($)[1]	Stock Awards ($)	Option Awards($)[2]	All Other Compensation($)[3]	Total($)
Jeffrey Finer, M.D., Ph.D. *Chief Executive Officer*	2023	501,396	284,310	—	1,347,554	3,000	2,136,260
Liz Bhatt, M.S., M.B.A. *Chief Operating Officer*	2023	413,253	203,270	—	264,173	3,000	883,696
Samira Shaikhly, *Chief People Officer*[4]	2023	322,083	182,094	—	235,359	3,000	742,536
Daniel Long, D.Phil., *SVP, Drug Discovery*	2023	369,357	212,090[5]	—	62,296	3,000	646,743
Uwe Klein, Ph.D., *SVP, Biological Sciences*	2023	363,627	149,607	—	62,296	3,000	578,530

(1) The amounts reported consist of (i) for Dr. Finer, Ms. Bhatt, Ms. Shaikhly, Dr. Long and Dr. Klein, $284,310, $203,270, $132,094, $149,590 and $149,607, respectively, for discretionary annual bonuses earned for the fiscal year ended December 31, 2023 and (ii) for Ms. Shaikhly and Dr. Long, $50,000 and $62,500, respectively, for sign-on bonuses.

(2) The amounts reported represent the aggregate grant date fair value of stock options awarded to our NEOs during the fiscal year ended December 31, 2023, calculated in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718, disregarding estimated forfeitures related to service-based vesting. For a description of the assumptions used in determining these values, see Note 10—"*Stock-Based Compensation*" to our financial statements included elsewhere in this prospectus. The amount reported in this column reflects the accounting cost for the stock options and does not correspond to the actual economic value that may be received by our NEOs upon the exercise of the stock options or any sale of the underlying shares.
(3) The amounts reported represent 401(k) matching contributions made by the Company to our NEOs.
(4) Ms. Shaikhly commenced employment with the Company on February 1, 2023 and her annual base salary and annual bonus for 2023 were pro-rated accordingly.
(5) Dr. Long commenced employment with the Company on October 4, 2021 and his sign-on bonus was paid in two tranches: (i) $62,500 within 30 days of January 1, 2022 and (ii) $62,500 within 30 days of January 1, 2023, subject to his continued employment with the Company through each such date of payment.

Narrative to the 2023 Summary Compensation Table

2023 Base Salaries

Our NEOs each receive a base salary to compensate them for services rendered to us. The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. Base salaries are reviewed annually, typically in connection with our annual performance review process, approved by our board of directors or the compensation committee of our board of directors (compensation committee), and may be adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance, and experience.

From January 1, 2023 through October 31, 2023, the annual base salaries for Dr. Finer, Ms. Bhatt and Dr. Klein were $496,375, $409,863, and $362,472, respectively. Ms. Shaikhly commenced employment with us on February 1, 2023 and her annual base salary from February 1, 2023 through October 31, 2023 was $350,000. Effective November 1, 2023, the annual base salaries for Dr. Finer, Ms. Bhatt, Ms. Shaikhly, and Dr. Klein increased to $526,500, $430,200, $357,500, $369,400, respectively. Dr. Long's annual base salary for the entire fiscal year ended December 31, 2023 was $369,357.

2023 Cash Incentive Compensation

For the fiscal year ended December 31, 2023, each of our NEOs was eligible to earn a discretionary annual bonus based on the Company's achievement of certain corporate performance objectives, as determined by our board of directors. The 2023 target annual bonuses for Dr. Finer and Ms. Bhatt were 40% and 35%, respectively, and 30% for Ms. Shaikhly, Dr. Long and Dr. Klein, of the applicable NEO's annual base salary. The corporate performance objectives for our NEOs' 2023 annual bonuses were based on the Company's achievement of certain program, platform and finance/business development goals, which were determined to have been achieved at 135% of target. The discretionary annual bonuses received by each NEO with respect to the fiscal year ended December 31, 2023 were $284,310, $203,270, $132,094, $149,590 and $149,607 for Dr. Finer, Ms. Bhatt, Ms. Shaikhly, Dr. Long and Dr. Klein, respectively. Ms. Shaikhly's 2023 annual bonus was pro-rated based on her commencement of employment with the Company effective February 1, 2023.

In connection with Ms. Shaikhly's and Dr. Long's commencement of employment, they were also entitled to a $50,000 and $62,500, respectively, sign-on bonus payable in 2023, subject to their continued employment with the Company through the date of payment. For Ms. Shaikhly, her sign-on bonus is subject to full repayment if she (i) is terminated by the Company for "cause," as defined in the Shaikhly Offer Letter (as defined below) or (ii) resigns from the Company for any reason, in either case prior to the second anniversary of the payment of the sign-on bonus.

Equity-Based Compensation

Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants promote executive retention because they incentivize our executive officers to remain in our employment during the vesting period.

Accordingly, our board of directors periodically reviews the equity incentive compensation of our executive officers and may grant equity incentive awards to them from time to time. During the fiscal year ended December 31, 2023, we granted option awards to our NEOs under the 2021 Plan as described in more detail in the "*Outstanding Equity Awards at 2023 Fiscal Year-End*" table below.

Perquisites or Personal Benefits

Perquisites and other personal benefits are not a significant component of our executive compensation program. Accordingly, we do not provide perquisites or personal benefits to our NEOs with an aggregate amount equal to or greater than $10,000.

401(k) Plan

We currently maintain a tax-qualified 401(k) retirement savings plan (401(k) plan) for our employees, including our NEOs, who satisfy certain eligibility requirements. Our NEOs are eligible to participate in the 401(k) plan on the same terms as other full-time employees. Our 401(k) plan is intended to qualify for favorable tax treatment under Section 401(a) of the Code and contains a cash or deferred feature that is intended to meet the requirements of Section 401(k) of the Code. Our 401(k) plan allows for discretionary matching contributions under the plan and in 2023, we provided discretionary matching contributions equal to 50% of up to the first 8% of eligible compensation, capped at $3,000 annually per employee. We believe that providing a vehicle for tax-deferred retirement savings though our 401(k) plan adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our NEOs, in accordance with our compensation policies. Other than the 401(k) plan, we do not provide any qualified or non-qualified retirement or deferred compensation benefits to our employees, including our NEOs.

Executive Employment Arrangements

We have entered into an offer letter with each of our NEOs in connection with his or her employment with us, which set forth the terms and conditions of his or her employment, as applicable. The material terms of such offer letters are described below. In connection with this offering, we have adopted a new executive severance plan (Executive Severance Plan), which will become effective upon the closing of this offering. Each of the NEOs may participate in the Executive Severance Plan. The Executive Severance Plan will provide for certain payments and benefits in the event of a termination of employment, including an involuntary employment in connection with a change in control of the Company, and will replace the severance provisions in the NEOs' offer letters, if any.

Prior Employment Arrangements in Place During the 2023 Fiscal Year

Jeffrey Finer, M.D., Ph.D.

On September 9, 2022, we entered into an offer letter with Dr. Finer effective as of September 13, 2022, for the position of our Chief Executive Officer (Finer Offer Letter). The Finer Offer Letter provided for Dr. Finer's at-will employment, and an initial annual base salary and initial target annual bonus, each of which has subsequently been increased as described above under "*2023 Base Salaries*" and "*2023 Cash Incentive Compensation*." The Finer Offer Letter also provided for a one-time $100,000 sign on bonus and the grant of an award of restricted stock. Dr. Finer is eligible to participate in the employee benefit plans generally available to our employees, subject to the terms of those plans.

The Finer Offer Letter provides that in the event that Dr. Finer's employment is terminated by the Company without "cause" or he resigns for "good reason" in either case outside a "change of control period" (each as defined in the Finer Offer Letter), subject to Dr. Finer's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, he will be entitled to receive (i) base salary continuation for 12 months following termination and (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Finer had he remained employed with the Company until the earliest of (A) 12 months following termination, (B) Dr. Finer becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Finer's COBRA health continuation period.

In addition, the Finer Offer Letter provides that in the event that Dr. Finer's employment is terminated by the Company without "cause" or he resigns for "good reason," in either case within a "change of control period," subject to Dr. Finer's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, in lieu of the payments and benefits described above, he will be entitled to receive (i) base salary continuation for 12 months following termination, (ii) the amount of his then-current target bonus for the year of termination, (iii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Finer had he remained employed with the Company until the earliest of (A) 12 months following termination, (B) Dr. Finer becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Finer's COBRA health continuation period, and (iv) accelerated vesting of all time-based stock options and other time-based stock-based awards.

Dr. Finer also entered into a standard form agreement with respect to confidential information, intellectual property assignment and non-solicitation restrictions.

Liz Bhatt, M.S., M.B.A.

On May 20, 2022, the Company entered into an offer letter with Ms. Bhatt effective as of June 15, 2022, for the position of our Chief Operating Officer (Bhatt Offer Letter). The Bhatt Offer Letter provides for Ms. Bhatt's at-will employment, and an initial annual base salary and initial target annual bonus, each of which has subsequently been increased as described above under "*2023 Base Salaries*" and "*2023 Cash Incentive Compensation*." The Bhatt Offer Letter also provided for a one-time $60,000 sign on bonus and the grant of an award of restricted stock. Ms. Bhatt is eligible to participate in the employee benefit plans generally available to employees, subject to the terms of those plans.

The Bhatt Offer Letter provides that in the event that Ms. Bhatt's employment is terminated by the Company without "cause" outside a "change of control period" (each as defined in the Bhatt Offer Letter), subject to Ms. Bhatt's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, she will be entitled to receive (i) base salary continuation for nine months following termination and (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Ms. Bhatt had she remained employed with the Company until the earliest of (A) nine months following termination, (B) Ms. Bhatt becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Ms. Bhatt's COBRA health continuation period.

In addition, the Bhatt Offer Letter provided that in the event that Ms. Bhatt's employment was terminated by the Company without "cause" within a "change of control period," subject to Ms. Bhatt's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, in lieu of the payments and benefits described above, she would have been entitled to receive (i) base salary continuation for nine months following termination, (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Ms. Bhatt had she remained employed with the Company until the earliest of (A) nine months following termination, (B) Ms. Bhatt becoming

eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Ms. Bhatt's COBRA health continuation period, and (iii) accelerated vesting of all time-based stock options and other time-based stock-based awards.

Ms. Bhatt also entered into a standard form agreement with respect to confidential information, intellectual property assignment and non-solicitation restrictions.

Samira Shaikhly

On December 22, 2022, the Company entered into an offer letter with Ms. Shaikhly effective as of February 1, 2023, for the position of our Chief People Officer (Shaikhly Offer Letter). The Shaikhly Offer Letter provides for Ms. Shaikhly's at-will employment, and an initial annual base salary and initial target annual bonus, each of which has subsequently been increased as described above under "*2023 Base Salaries*" and "*2023 Cash Incentive Compensation*." The Shaikhly Offer Letter also provided for the grant of an award of stock options and a $50,000 sign-on bonus subject to full repayment if Ms. Shaikhly (i) is terminated by the Company for "cause" (as defined in the Shaikhly Offer Letter) or (ii) resigns from the Company for any reason, in either case prior to the second anniversary of the payment of the sign-on bonus. Ms. Shaikhly is eligible to participate in the employee benefit plans generally available to employees, subject to the terms of those plans.

The Shaikhly Offer Letter provides that in the event that Ms. Shaikhly's employment is terminated by the Company without "cause" outside a "change of control period" (each as defined in the Shaikhly Offer Letter), subject to Ms. Shaikhly's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, she will be entitled to receive (i) base salary continuation for six months following termination and (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Ms. Shaikhly had she remained employed with the Company until the earliest of (A) six months following termination, (B) Ms. Shaikhly becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Ms. Shaikhly's COBRA health continuation period.

In addition, the Shaikhly Offer Letter provides that in the event that Ms. Shaikhly's employment is terminated by the Company without "cause" within a "change of control period," subject to Ms. Shaikhly's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, in lieu of the payments and benefits described above, she will be entitled to receive (i) base salary continuation for six months following termination, (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Ms. Shaikhly had she remained employed with the Company until the earliest of (A) six months following termination, (B) Ms. Shaikhly becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Ms. Shaikhly's COBRA health continuation period, and (iii) accelerated vesting of all time-based stock options and other time-based stock-based awards.

Ms. Shaikhly also entered into a standard form agreement with respect to confidential information, intellectual property assignment and non-solicitation restrictions.

Daniel Long, D.Phil.

On September 27, 2021, the Company entered into an offer letter with Dr. Long effective as of October 4, 2021, for the position of our Senior Vice President, Drug Discovery (Long Offer Letter). The Long Offer Letter provides for Dr. Long's at-will employment, and an initial annual base salary and initial target annual bonus, each of which has subsequently been increased as described above under "*2023 Base Salaries*" and "*2023 Cash Incentive Compensation*." The Long Offer Letter also provided for the grant of an award of restricted stock and a sign-on bonus subject to two disbursements: (i) $62,500 which was paid within 30 days of January 1, 2022 and (ii) $62,500 which was paid within 30 days of January 1, 2023, subject to Dr. Long's continuous employment with the Company through each such date. Dr. Long is eligible to participate in the employee benefit plans generally available to employees, subject to the terms of those plans.

The Long Offer Letter provides that in the event that Dr. Long's employment is terminated by the Company without "cause" outside a "change of control period" (each as defined in the Long Offer Letter), subject to Dr. Long's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, he will be entitled to receive (i) base salary continuation for six months following termination and (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Long had he remained employed with the Company until the earliest of (A) six months following termination, (B) Dr. Long becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Long's COBRA health continuation period.

In addition, the Long Offer Letter provides that in the event that Dr. Long's employment is terminated by the Company without "cause" within a "change of control period," subject to Dr. Long's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, in lieu of the payments and benefits described above, he will be entitled to receive (i) base salary continuation for six months following termination, (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Long had he remained employed with the Company until the earliest of (A) six months following termination, (B) Dr. Long becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Long's COBRA health continuation period, and (iii) accelerated vesting of all time-based stock options and other time-based stock-based awards.

Dr. Long also entered into a standard form agreement with respect to confidential information, intellectual property assignment and non-solicitation restrictions.

Uwe Klein, Ph.D.

On February 17, 2021, the Company entered into an offer letter with Dr. Klein effective as of November 1, 2021, for the position of our Senior Vice President, Biological Sciences (Klein Offer Letter). The Klein Offer Letter provides for Dr. Klein's at-will employment, and an initial annual base salary and initial target annual bonus, each of which has subsequently been increased as described above under "*2023 Base Salaries*" and "*2023 Cash Incentive Compensation*." The Klein Offer Letter also provides for the a one-time $100,000 sign on bonus and, at Dr. Klein's option, either grant of an award of restricted stock or an award of stock options. Dr. Klein is eligible to participate in the employee benefit plans generally available to employees, subject to the terms of those plans.

The Klein Offer Letter provides that in the event that Dr. Klein's employment is terminated by the Company without "cause" outside a "change of control period" (each as defined in the Klein Offer Letter), subject to Dr. Klein's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, he will be entitled to receive (i) base salary continuation for six months following termination and (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Klein had he remained employed with the Company until the earliest of (A) six months following termination, (B) Dr. Klein becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Klein's COBRA health continuation period.

In addition, the Klein Offer Letter provides that in the event that Dr. Klein's employment is terminated by the Company without "cause" within a "change of control period," subject to Dr. Klein's execution and delivery of an irrevocable separation agreement, including a general release of claims in the Company's favor, in lieu of the payments and benefits described above, he will be entitled to receive (i) base salary continuation for six months following termination, (ii) monthly payments of the portion of the premiums equal to the amounts that the Company would have paid to provide health insurance to Dr. Klein had he remained employed with the Company until the earliest of (A) six months following termination, (B) Dr. Klein becoming eligible for group medical plan benefits under any other employer's group health plan or (C) the end of Dr. Klein's COBRA health continuation period, and (iii) accelerated vesting of all time-based stock options and other time-based stock-based awards.

Dr. Klein also entered into a standard form agreement with respect to confidential information, intellectual property assignment and non-solicitation restrictions.

Executive Severance Plan

Our board of directors has adopted an Executive Severance Plan (Severance Plan), subject to the effectiveness of this offering, in which our NEOs, and certain other executives, will participate. The benefits provided in the Severance Plan will replace any severance for which our NEOs may be eligible under their existing offer letters or other agreements or arrangements.

The Severance Plan will provide that upon a termination by us for any reason other than for "cause," as defined in the Severance Plan, death or "disability," as defined in the Severance Plan, or resignation for "good reason", as defined in the Severance Plan, in each case outside of the change in control period (i.e., the period beginning three months prior to and ending one year after a "change in control," as defined in the Severance Plan), an eligible participant will be entitled to receive, subject to the execution and delivery of an effective release of claims in favor of the Company and continued compliance with all applicable restrictive covenants, (i) 12 months of "base salary" (i.e., the higher of the annual base salary in effect immediately prior to the date of termination or the annual base salary in effect for the year immediately prior to the year in which the date of termination occurs) for our Chief Executive Officer, nine months for Tier 2 executives (which is determined by the plan administrator and includes our Chief Operating Officer), and six months for Tier 3 executives (which is determined by the plan administrator and includes our remaining NEOs) and (ii) an amount equal to the monthly employer contribution, based on the premiums as of the date of termination, that we would have made to provide health insurance for the NEO if he or she had remained employed by us for up to 12 months for our Chief Executive Officer, nine months for Tier 2 executives and six months for Tier 3 executives. The payments under (i) and (ii) will be paid in substantially equal installments in accordance with our payroll practice over 12 months for our Chief Executive Officer, nine months for Tier 2 executives and six months for Tier 3 executives.

The Severance Plan will also provide that upon a (A) termination by us other than for cause, death or disability or (B) resignation for good reason, in each case within the change in control period, an eligible participant will be entitled to receive, in lieu of the payments and benefits above and subject to the execution and delivery of an effective release of claims in favor of the Company and continued compliance with all applicable restrictive covenants, (I) a lump sum amount equal to 18 months of the base salary and 1.5x of the "target bonus" (i.e., the higher of the target annual bonus in effect immediately prior to the date of termination or the target annual bonus in effect immediately prior to the change in control) for our Chief Executive Officer, 12 months of the base salary and 1.0x of the target bonus for our Tier 2 executives and 9 months of the base salary and 0.75x of the target bonus for our Tier 3 executives, (II) an amount equal to the monthly employer contribution, based on the premiums as of the date of termination, that we would have made to provide health insurance for the NEO if he or she had remained employed by us for 18 months for our Chief Executive Officer, 12 months for our Tier 2 executives and 9 months for our Tier 3 executives, and (III) for all outstanding and unvested equity awards of the Company that are subject to time-based vesting held by the participant, full accelerated vesting of such awards; provided, that the performance conditions applicable to any outstanding and unvested equity awards subject to performance-based vesting will be subject to the terms of the applicable award agreement.

The payments and benefits provided under the Severance Plan in connection with a change in control may not be eligible for a federal income tax deduction by us pursuant to Section 280G of the Code. These payments and benefits may also subject an eligible participant, including the NEOs, to an excise tax under Section 4999 of the Code. If the payments or benefits payable in connection with a change in control would be subject to the excise tax imposed under Section 4999 of the Code, then those payments or benefits will be reduced if such reduction would result in a higher net after-tax benefit to the participant.

Outstanding Equity Awards at Fiscal 2023 Year-End

The following table sets forth information concerning outstanding equity awards held by our NEOs as of December 31, 2023.

			Option Awards[1]				Stock Awards[1]	
Name	Grant Date	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)[2]
Jeffrey Finer, M.D., Ph.D.	9/13/2022	8/2/2022	—	—	—	—	348,420[3]	1,620,153
	11/12/2023	8/1/2023	37,684[3]	414,528 [3]	$ 2.76	11/11/2033		
Liz Bhatt, M.S., M.B.A.	9/13/2022	6/15/2022	—	—	—	—	108,881[4]	506,297
	11/12/2023	8/1/2023	7,387[3]	81,264[3]	$ 2.76	11/11/2033		
Samira Shaikhly	3/31/2023	2/1/2023	—[4]	69,683[4]	$ 1.55	3/30/2033		
	11/12/2023	2/1/2023	—[4]	15,098[4]	$ 2.76	11/11/2033		
Daniel Long, D.Phil.	10/26/2021	11/2/2021	—	—	—	—	46,456[5]	216,020
	11/12/2023	8/1/2023	1,742[3]	19,163[3]	$ 2.76	11/11/2033		
Uwe Klein, Ph.D.	10/26/2021	4/1/2021	—	—	—	—	34,842[4]	162,015
	11/12/2023	8/1/2023	1,742[3]	19,163[3]	$ 2.76	11/11/2033		

(1) Each equity award is subject to the terms of the 2021 Plan (as described below).

(2) This amount is based on the fair market value of a share of our common stock equal to $4.65 as of December 31, 2023, as determined by our board of directors.

(3) The shares underlying the stock option award or restricted stock award, as applicable, vest in 48 equal monthly installments over a four-year period, commencing on the vesting commencement date, subject to the applicable NEO's continued service relationship through each applicable vesting date. The award is also subject to certain acceleration of vesting rights as set forth in the applicable NEO's Offer Letter, as described above.

(4) The shares underlying the stock option award or restricted stock award, as applicable, vest as follows: 25% of such shares vested on the first anniversary of the vesting commencement date, and the remaining 75% of the shares vest in 36 equal monthly installments over the following three years, subject to the applicable NEO's continued service relationship through each applicable vesting date. The award is also subject to certain acceleration of vesting rights as set forth in the applicable NEO's Offer Letter, as described above.

(5) The shares underlying the restricted stock award vest as follows: 25% of such shares vested on December 1, 2022, and the remaining 75% of the shares vest in 36 equal monthly installments over the following three years, subject to the applicable NEO's continued service relationship through each applicable vesting date. The award is also subject to certain acceleration of vesting rights as set forth in the applicable NEO's Offer Letter, as described above.

Employee Benefit and Equity Compensation Plans

2021 Stock Option and Grant Plan

The 2021 Plan was initially approved and adopted by our board of directors and stockholders on October 26, 2021 and has been subsequently amended from time to time thereafter to increase the number of shares reserved for issuance thereunder. Under the 2021 Plan, we have reserved for issuance an aggregate of 5,403,314 shares of our common stock for the issuance of stock options and other equity awards. This number of shares of our common stock reserved for issuance is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. As of December 31, 2023, options to purchase 1,123,296 shares of our common stock and 774,225 shares of our restricted stock were outstanding under the 2021 Plan and 227,819 shares of our restricted stock were outstanding from grants made outside of the 2021 Plan. Our board of directors has determined not to make any further awards under the 2021 Plan following the completion of this offering, but all

outstanding awards under the 2021 Plan will continue to be governed by their existing terms. The maximum number of shares that may be issued as incentive stock options under the 2021 Plan may not exceed 42,419,145 shares. In connection with this offering, we have adopted a new incentive equity plan under which we will grant equity-based awards following this offering, as described below under "*2024 Stock Option and Incentive Plan*." This summary is not a complete description of all provisions of the 2021 Plan and is qualified in its entirety by reference to the 2021 Plan, which will be filed as an exhibit to the registration statement of which this prospectus is part.

The shares of our common stock underlying any awards that are forfeited, cancelled, reacquired by us prior to vesting, satisfied without the issuance of stock or otherwise terminated (other than by exercise), or held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding under the 2021 Plan will be added back to the shares of our common stock available for issuance under the 2021 Plan (or, following the completion of this offering, the 2024 Plan (as defined below)).

Our board of directors has acted as administrator of the 2021 Plan. The administrator has full power to, among other things, select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, to accelerate at any time the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2021 Plan. Persons eligible to participate in the 2021 Plan are those full or part-time officers, employees, non-employee directors, consultants, and key persons as selected from time to time by the administrator in its discretion.

The 2021 Plan permits the granting of both options to purchase shares of our common stock intended to qualify as incentive stock options under Section 422 of the Code and options that do not so qualify. The option exercise price of each option will be determined by the administrator but may not be less than 100% of the fair market value of our common stock on the date of grant, or in the case of an incentive stock option granted to a 10% owner, the exercise price shall not be less than 110% of the fair market value of our common stock on the date of grant. The term of each option will be fixed by the 2021 Plan administrator and may not exceed ten years from the date of grant, or five years from the date of grant in the case of an incentive stock option granted to a 10% owner. The 2021 Plan administrator will determine at what time or times each option may be exercised.

The 2021 Plan administrator may award restricted shares of our common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include continued employment with us through a specified vesting period and/or the achievement of certain performance goals.

The 2021 Plan administrator may also grant shares of our common stock that are free from any restrictions under the 2021 Plan. Unrestricted stock may be granted to participants in recognition of past services or for other valid consideration and may be issued in lieu of cash compensation due to such participant.

In the event of certain corporate transactions and events, including a reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or other similar change to the Company's capital stock, the 2021 Plan administrator shall make appropriate adjustments to the maximum number of shares reserved for issuance under the 2021 Plan, the number and kind of securities subject to outstanding awards under the 2021 Plan and the repurchase or exercise price of any outstanding awards under the 2021 Plan.

Upon the effective time of a "sale event" (as defined in the 2021 Plan), all outstanding option awards granted under the 2021 Plan shall terminate unless assumed, substituted, or continued by a successor entity. In the event of such termination, individuals holding options will be permitted to exercise such options within a specified period of time prior to the sale event. In the event of a sale event, all unvested restricted stock awards and restricted stock units (other than those that become vested as a result of the sale event) will be forfeited unless assumed, substituted, or continued by a successor entity. With respect to individuals holding restricted

stock that is forfeited upon a sale event, such restricted stock shall be repurchased by the Company at a price per share equal to the original per share purchase price paid by the holder for such shares of our restricted stock. In addition, in connection with a sale event, we may make or provide for a cash payment to participants in exchange for the cancellation of their options (to the extent then vested and exercisable, including by reason of acceleration in connection with such sale event) or outstanding restricted stock or restricted stock units, in an amount equal to the difference between (a) the per share consideration in the sale event times the number of shares subject to such awards being cancelled and (b) the aggregate exercise price of such outstanding vested and exercisable stock options, as applicable, with any such cash payments in respect of restricted stock or restricted stock units to be paid at the time of the sale event or upon the later vesting of such awards.

Our board of directors may amend or discontinue the 2021 Plan and the 2021 Plan administrator may amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose, but no such action may adversely affect rights under any outstanding award without the holder's consent. Certain amendments to the 2021 Plan require the approval of our stockholders. The 2021 Plan administrator may exercise its discretion to reduce the exercise price of outstanding stock options or to effect repricing through the cancellation of outstanding stock options and grant of replacement awards.

No awards may be granted under the 2021 Plan after the date that is ten years from the effective date of the 2021 Plan.

2024 Stock Option and Incentive Plan

The 2024 Plan was adopted by our board of directors on October 1, 2024, approved by our stockholders on October 18, 2024, and will become effective upon the date immediately preceding the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The 2024 Plan will replace the 2021 Plan as our board of directors has determined not to make additional awards under the 2021 Plan following the completion of this offering. However, the 2021 Plan will continue to govern outstanding equity awards granted thereunder. The 2024 Plan allows us to make equity-based and cash-based incentive awards to our officers, employees, directors and consultants. The following summary describes the material terms of the 2024 Plan. This summary is not a complete description of all provisions of the 2024 Plan and is qualified in its entirety by reference to the 2024 Plan, which will be filed as an exhibit to the registration statement to which this prospectus is a part.

We have initially reserved 3,690,000 shares of our common stock for the issuance of awards under the 2024 Plan (Initial Limit). The 2024 Plan provides that the number of shares reserved and available for issuance under the 2024 Plan will automatically increase on January 1, 2025 and each January 1 thereafter through January 1, 2034, by 5% of the outstanding number of shares of our common stock on the immediately preceding December 31 or such lesser number of shares as determined by our compensation committee (Annual Increase). The number of shares reserved under the 2024 Plan is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

The shares we issue under the 2024 Plan will be authorized but unissued shares or shares that we reacquire. The shares of our common stock underlying any awards under the 2024 Plan and the 2021 Plan that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without the issuance of stock, expire or are otherwise terminated (other than by exercise) will be added back to the shares of our common stock available for issuance under the 2024 Plan.

The maximum number of shares of our common stock that may be issued in the form of incentive stock options shall not exceed the Initial Limit, cumulatively increased on January 1, 2025 and on each January 1 thereafter by the lesser of the Annual Increase for such year or 3,690,000 shares of our common stock.

The grant date fair value of all awards made under the 2024 Plan and all other cash compensation paid by us to any non-employee director in any calendar year for services as a non-employee director shall not exceed $750,000; provided, however, that such amount shall be $1,000,000 for the calendar year in which the applicable non-employee director is initially elected or appointed to our board of directors.

The 2024 Plan will be administered by our compensation committee. Our compensation committee has the full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted and the number of shares subject to such awards, to make any combination of awards to participants, to accelerate at any time the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2024 Plan. Persons eligible to participate in the 2024 Plan will be those full or part-time officers, employees, non-employee directors and consultants as selected from time to time by our compensation committee in its discretion.

The 2024 Plan permits the granting of both options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and options that do not so qualify. The option exercise price of each option will be determined by our compensation committee but may not be less than 100% of the closing price of our common stock on the date of grant (or, if no closing price is reported on that date, the closing price on the immediately preceding date on which a closing price was reported) (110% in the case of certain incentive stock options) unless the option (i) is granted pursuant to a transaction described in, and in a manner consistent with Section 424(a) of the Code, (ii) is granted to an individual who is not subject to U.S. income tax, or (iii) complies with or is exempt from Section 409A of the Code. The term of each option will be fixed by our compensation committee and may not exceed ten years from the date of grant (or five years in the case of certain incentive stock options). Our compensation committee will determine at what time or times each option may be exercised.

Our compensation committee may award stock appreciation rights under the 2024 Plan subject to such conditions and restrictions as it may determine. Stock appreciation rights entitle the recipient to shares of our common stock, or cash, equal to the value of the appreciation in our stock price over the exercise price. The exercise price of each stock appreciation right generally may not be less than 100% of the closing price of our common stock on the date of grant (or, if no closing price is reported on that date, the closing price on the immediately preceding date on which a closing price was reported) unless the share appreciation right (i) is granted pursuant to a transaction described in, and in a manner consistent with Section 424(a) of the Code, (ii) is granted to an individual who is not subject to U.S. income tax, or (iii) complies with or is exempt from Section 409A of the Code. The term of each stock appreciation right will be fixed by our compensation committee and may not exceed 10 years from the date of grant. Our compensation committee will determine at what time or times each stock appreciation right may be exercised.

Our compensation committee may award restricted shares of our common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified vesting period. Our compensation committee may also grant shares of our common stock that are free from any restrictions under the 2024 Plan. Unrestricted stock may be granted to participants in recognition of past services or for other valid consideration and may be issued in lieu of cash compensation due to such participant.

Our compensation committee may grant dividend equivalent rights to participants that entitle the recipient to receive credits for dividends that would be paid if the recipient had held a specified number of shares of our common stock.

Our compensation committee may grant cash bonuses under the 2024 Plan to participants, subject to the achievement of certain performance goals.

The 2024 Plan provides that upon the effectiveness of a “sale event,” as defined in the 2024 Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2024 Plan. To the extent that awards granted under the 2024 Plan are not assumed or continued or substituted by the successor

entity, upon the effective time of the sale event, such awards shall terminate. In such case, except as may be otherwise provided in the relevant award agreement, all awards with time-based vesting, conditions or restrictions shall become fully vested and nonforfeitable as of the effective time of the sale event and all awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in connection with a sale event in the administrator's discretion or to the extent specified in the relevant award agreement. In the event of such termination, (i) individuals holding options and stock appreciation rights will be permitted to exercise such options and stock appreciation rights (to the extent exercisable) within a specified period of time prior to the sale event or (ii) we may make or provide for a payment, in cash or in kind, to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share consideration payable to our stockholders in the sale event and the exercise price of the options or stock appreciation rights and we may make or provide for a payment, in cash or in kind, to participants holding other vested awards.

Our board of directors may amend or discontinue the 2024 Plan and our compensation committee may amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose, but no such action may adversely affect rights under an award without the holder's consent. Certain amendments to the 2024 Plan require the approval of our stockholders. The administrator of the 2024 Plan is specifically authorized to exercise its discretion to reduce the exercise price of outstanding stock options and stock appreciation rights or effect the repricing of such awards through cancellation and re-grants without stockholder consent. No awards may be granted under the 2024 Plan after the date that is 10 years from the effective date of the 2024 Plan. No awards under the 2024 Plan have been made prior to the date of this prospectus.

2024 Employee Stock Purchase Plan

The ESPP was adopted by our board of directors on October 1, 2024, approved by our stockholders on October 18, 2024, and will become effective on the date immediately preceding the date on which the registration statement of which this prospectus forms a part is declared effective by the SEC. The ESPP is intended to have two components: a component intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code (423 Component) and a component that is not intended to qualify (Non-423 Component). Except as otherwise provided, the Non-423 Component will be operated and administered in the same manner as the 423 Component, except where prohibited by law. The following summary describes the material terms of the ESPP. This summary is not a complete description of all provisions of the ESPP and is qualified in its entirety by reference to the ESPP, which will be filed as an exhibit to the registration statement to which this prospectus is a part.

The ESPP initially reserves and authorizes the issuance of up to a total of 369,402 shares of our common stock to participating employees. The ESPP provides that the number of shares reserved and available for issuance will automatically increase on January 1, 2026 and each January 1 thereafter through January 1, 2034, by the least of (i) 369,402 shares of our common stock, (ii) 1% of the outstanding number of shares of our common stock on the immediately preceding December 31, or (iii) such lesser number of shares of our common stock as determined by the administrator of the ESPP. The number of shares reserved under the ESPP is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

All employees who are customarily employed by us or one of our designated subsidiaries for more than 20 hours per week and who have been employed for such period as determined by the administrator, with such period not to exceed two years, are eligible to participate in the ESPP. However, any employee who owns 5% or more of the total combined voting power or value of all classes of our stock will not be eligible to purchase shares of our common stock under the ESPP.

We may make one or more offerings, consisting of one or more purchase periods, each year to our employees to purchase shares under the ESPP. The administrator may, in its discretion, determiner when each

offering will occur, including the duration of any offering; provided, that no offering will exceed 27 months in duration. Each eligible employee may elect to participate in any offering by submitting an enrollment form at least 15 business days before the applicable offering date. Unless the administrator chooses otherwise prior to an offering date, and to the extent an offering has more than one purchase period, if the fair market value of the our common stock on any exercise date in an offering is lower than the fair market value of our common stock on the offering date, then all participants in such offering automatically will be withdrawn from such offering immediately after the exercise of their option on such exercise date and automatically re-enrolled in the immediately following offering as of the first day thereof and the preceding offering will terminate.

Each employee who is a participant in the ESPP may purchase shares of our common stock by authorizing payroll deductions of up to 15% of his or her eligible compensation during an offering period. Unless the participating employee has previously withdrawn from the offering, his or her accumulated payroll deductions will be used to purchase shares of our common stock on the last business day of the offering period at a price equal to 85% of the closing price of the shares of our common stock on the first business day or the last business day of the offering period (or, if no closing price is reported on that date, the closing price on the immediately preceding date on which a closing price was reported), whichever is lower, provided that no more than a number of shares of common stock determined by dividing $25,000 by the fair market value of our common stock on the offering date of such offering (or such other lesser maximum number of shares as may be established by the administrator) may be purchased by any one employee during any offering period. Under applicable tax rules, an employee may purchase no more than $25,000 worth of shares of our common stock, valued at the start of the offering period, under the ESPP for each calendar year during which any option granted to the employee is outstanding at any time.

The accumulated payroll deductions of any employee who is not a participant on the last day of an offering period will be refunded. An employee's rights under the ESPP terminate upon voluntary withdrawal from the plan or when the employee ceases employment with us for any reason.

The ESPP may be terminated or amended by our board of directors at any time. An amendment that increases the number of shares of our common stock authorized under the ESPP and certain other amendments require the approval of our stockholders.

Senior Executive Cash Incentive Bonus Plan

In October 2024, our board of directors adopted the Senior Executive Cash Incentive Bonus Plan (Bonus Plan). The Bonus Plan provides for cash bonus payments based upon Company and individual performance targets established by our compensation committee. The payment targets will be related to financial and operational measures or objectives with respect to our Company, or corporate performance goals, as well as individual performance objectives. The following summary describes the material terms of the Bonus Plan. This summary is not a complete description of all provisions of the Bonus Plan and is qualified in its entirety by reference to the Bonus Plan, which is filed as an exhibit to the registration statement to which this prospectus is a part.

Our compensation committee may select corporate performance goals from among the following: developmental, publication, clinical, or regulatory milestones; cash flow (including, but not limited to, operating cash flow and free cash flow); revenue; corporate revenue; earnings before interest, taxes, depreciation and amortization; net income (loss) (either before or after interest, taxes, depreciation, and/or amortization); changes in the market price of our common stock; economic value-added; acquisitions, licenses, collaborations or strategic transactions; financing or other capital raising transactions; operating income (loss); return on capital, assets, equity or investment; stockholder returns; return on sales; total stockholder return; gross or net profit levels; productivity; expense efficiency; margins; operating efficiency; customer satisfaction; working capital; earnings (loss) per share of the Company's common stock; bookings, new bookings or renewals; sales or market shares; number of prescriptions or prescribing physicians; coverage decisions; leadership development, employee

retention and recruiting and other human resources matters; operating income and/or net annual recurring revenue; or any other performance goal selected by our compensation committee, any of which may be (A) measured in absolute terms, or compared to any incremental increase, (B) measured in terms of growth, as compared to results of a peer group, (C) compared to another company or companies or to results of a peer group, (D) measured against the market as a whole and/or as compared to applicable market indices and/or (E) measured on a pre-tax or post-tax basis (if applicable).

Each executive officer who is selected to participate in the Bonus Plan will have a target bonus opportunity set for each performance period. The bonus formulas will be adopted in each performance period by our compensation committee and communicated to each executive. The corporate performance goals will be measured at the end of each performance period after our financial reports have been published or such other appropriate time as our compensation committee determines. If the corporate performance goals and individual performance objectives are met, payments will be made as soon as practicable following the end of each performance period, but not later than two and a half months after the end of the year in which such performance period ends. Subject to the rights contained in any written agreement between the executive officer and us, an executive officer shall be required to be employed by us on the bonus payment date to be eligible to receive a bonus payment under the Bonus Plan. The Bonus Plan also permits our compensation committee to approve additional bonuses to executive officers in its sole discretion.

Equity Grants to Named Executive Officers Prior to this Offering

In September 2024, our board of directors approved option grants to certain employees of the Company, including our NEOs, with Drs. Finer, Long and Klein and Messes. Bhatt and Shaikhly being granted options to purchase 348,419, 40,648, 40,648, 92,911 and 34,841 shares of our common stock, respectively (Executive Options). The Executive Options were granted under the 2021 Plan and have an exercise price per share equal to $6.81. Subject to and contingent upon the earlier of an Initial Public Offering (as defined in the applicable option agreements, and which includes this offering) or a Sale Event (as defined in the 2021 Plan) in which such Executive Options will be assumed, continued or substituted by the successor entity, in either case no later than September 30, 2025, the vesting commencement date for such Executive Options shall be the date of such Initial Public Offering or Sale Event, as applicable. 1/48th of the Executive Options will vest upon each monthly anniversary of such vesting commencement date, in each case subject to the applicable optionee's continued service relationship with the Company through such vesting date. In the event that the Company terminates an NEO's employment without Cause (as defined in the applicable NEO's offer letter with the Company) (or, for Dr. Finer only, he resigns for Good Reason (as defined in Dr. Finer's offer letter with the Company)), within the Change in Control Period (as defined in the applicable NEO's offer letter with the Company), subject to the applicable NEO signing a fully effective release, all of the unvested shares subject to the NEO's Executive Option will immediately vest.

DIRECTOR COMPENSATION

The following table presents the compensation awarded to, earned by, or paid to each person who served as a non-employee member of our board of directors during the fiscal year ended December 31, 2023 for their service on our board of directors during the fiscal year ended December 31, 2023. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to, or pay any other compensation to any of the non-employee members of our board of directors in 2023. Non-employee directors affiliated with Samsara, RA Capital Management, and Third Rock Ventures, including Mr. Bassan and Drs. Simson and Tong, did not receive cash or equity compensation from us for their service as non-employee directors. The compensation for the fiscal year ended December 31, 2023 received by Dr. Finer, as an NEO of the Company, is presented in the "*2023 Summary Compensation Table*" above. Dr. Ezekowitz, who is affiliated with Third Rock Ventures, previously served as our interim Chief Medical Officer during the fiscal year ended December 31, 2023, but was not an NEO. Dr. Ezekowitz has been omitted from the table below since he does not receive any compensation for his services as a member of our board of directors. See the section titled "Certain Relationships and Related Person Transactions" included elsewhere in this prospectus for more information regarding Dr. Ezekowitz's compensation for the fiscal year ended December 31, 2023.

2023 Director Compensation Table

Name[1]	Fees Earned or Paid in Cash($)	Stock Awards ($)	Option Awards ($)[2]	All Other Compensation ($)	Total ($)
Abraham Bassan, M.S.	—	—	—	—	—
Bernard Coulie, M.D., Ph.D., M.B.A.[3]	—	—	100,423	—	100,423
Jake Simson, Ph.D.	—	—	—	—	—
Jeffrey Tong, Ph.D.	—	—	—	—	—

(1) As of December 31, 2023, Dr. Coulie was the only director holding outstanding equity awards and held options to purchase an aggregate of 29,034 shares of our common stock.

(2) The amounts reported represent the aggregate grant date fair value of the stock options awarded to our directors during the fiscal year ended December 31, 2023, calculated in accordance with FASB ASC Topic 718, disregarding estimated forfeitures related to service-based vesting. For a description of the assumptions used in determining these values, see Note 10—"*Stock-Based Compensation*" to our financial statements included elsewhere in this prospectus. The amount reported in this column reflects the accounting cost for the option and does not correspond to the actual economic value that may be received by our directors upon the exercise of the stock options or any sale of the underlying shares.

(3) Dr. Coulie joined our board of directors on December 7, 2023.

Director Engagement Letters

Ms. Shalini Sharp joined our board of directors on January 18, 2024. We have entered into director engagement letters with Dr. Coulie and Ms. Sharp. Pursuant to these engagement letters, each such director received an initial stock option grant for the purchase of 29,034 shares of our common stock that vests in 16 equal quarterly installments over four years, subject to continued service through each applicable vesting date. The stock options are subject to full accelerated vesting upon a "sale event" (as defined in the 2021 Plan). In addition, pursuant to their respective director engagement letter, Dr. Coulie and Ms. Sharp are each entitled to receive an annual cash retainer of $30,000, payable quarterly. Dr. Coulie's first payment occurred in January 2024. Each such director is eligible to receive reimbursement for their reasonable expenses incurred in attending board of directors' meetings in accordance with our generally applicable reimbursement policies.

Non-Employee Director Compensation Policy

In connection with this offering, our board of directors has adopted a non-employee director compensation policy, to be effective as of the date on which the registration statement of which this prospectus

forms a part is declared effective by the SEC. The policy will be designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. Under the policy, our non-employee directors will be eligible to receive cash retainers (which will be payable quarterly in arrears and prorated for partial years of service) and equity awards as set forth below:

Annual Retainer for Board Membership:	
Members	$ 40,000
Additional retainer for non-executive chair	$ 30,000
Additional Annual Retainer for Committee Membership:	
Audit Committee:	
Members (other than chair)	$ 7,500
Chair	$ 15,000
Compensation Committee:	
Members (other than chair)	$ 6,000
Chair	$ 12,000
Nominating and Corporate Governance Committee:	
Members (other than chair)	$ 5,000
Chair	$ 10,000

In addition, the non-employee director compensation policy will provide that, upon initial election or appointment to our board of directors, each non-employee director will be granted a one-time stock option to purchase 33,246 shares of our common stock (Director Initial Grant). The Director Initial Grant will vest in equal monthly installments over three years following the grant date, subject to continued service through the applicable vesting date. The Director Initial Grant will expire ten years from the date of grant and have an exercise price per share equal to the fair market value of our common stock on the date of grant.

Furthermore, on the date of each annual meeting of stockholders following the completion of this offering, each non-employee director who continues as a non-employee director following such meeting will be granted an annual stock option to purchase 16,623 shares of our common stock (Director Annual Grant). The Director Annual Grant will vest in full upon the earlier of (i) the first anniversary of the date of grant or (ii) the date of the next annual meeting of our stockholders, subject to continued service through the applicable vesting date. If a non-employee director joins our board of directors on a date other than the date of the annual meeting of our stockholders, then in lieu of the Director Annual Grant, such non-employee director will be granted a prorated portion of the Director Annual Grant corresponding to such partial year of service at the next annual meeting of stockholders. The pro-rated Director Annual Grant will vest in full upon the earlier of (A) the first anniversary of the date of grant or (B) the date of the next annual meeting of our stockholders, subject to continued service through the applicable vesting date. The Director Annual Grant (including any pro-rata portions thereof) will expire ten years from the date of grant and have an exercise price per share equal to the fair market value of our common stock on the date of grant.

The Director Initial Grants and the Director Annual Grants (including any pro-rata portions thereof) are subject to full accelerated vesting upon the sale of the Company.

The aggregate amount of compensation, including both equity compensation and cash compensation, paid to any non-employee director for service as a non-employee director in a calendar year period will not exceed $1,000,000 in the first calendar year such individual becomes a non-employee director and $750,000 in any other calendar year.

We will reimburse all reasonable out-of-pocket expenses incurred by directors for their attendance at meetings of our board of directors or any committee thereof.

Employee directors will receive no additional compensation for their service as a director.

Equity Grants to Directors Prior to This Offering

In September 2024, our board of directors approved option grants to certain directors, with Mr. Bassan, Drs. Coulie, Ezekowitz, Simson and Tong and Ms. Sharp each being granted an option to purchase 13,356 shares of our common stock (Director Options). The Director Options were granted under the 2021 Plan and have an exercise price per share equal to $6.81. Subject to and contingent upon an Initial Public Offering (as defined in the applicable option agreements, and which includes this offering) no later than September 30, 2025, the vesting commencement date for such Director Options shall be the effective date of such Initial Public Offering. 1/16th of the Director Options will vest in each quarterly installment following the vesting commencement date in each case subject to the applicable optionee's continued service relationship with the Company through such vesting date. Upon a Sale Event (as defined in the 2021 Plan), all of the unvested shares subject to the Director Options will vest immediately prior to the Sale Event, subject to the applicable optionee's continued service relationship with the Company.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions or series of transactions since January 1, 2022, to which we were or will be a party, in which:

- the amounts involved exceeded or will exceed the lesser of $120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years; and
- any of our directors, executive officers or holders of more than 5% or more of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities or affiliated entities, had or will have a direct or indirect material interest.

Compensation arrangements for our named executive officers and our directors are described in the sections titled "Director Compensation" and "Executive Compensation."

Private Placement of Securities

Series A Convertible Preferred Stock Financing

In 2021 and 2022, we issued and sold an aggregate of 75,000,000 shares of our Series A convertible preferred stock in two closings, at a purchase price of $1.00 per share, for an aggregate purchase price of $75.0 million. Included in this amount was $14.7 million of the then outstanding principal and interest on convertible promissory notes issued to Third Rock Ventures V, L.P. in 2020 and 2021, all of which converted into Series A convertible preferred stock in this financing in accordance with their terms.

Every 8.6103 shares of our outstanding Series A convertible preferred stock will automatically convert into approximately one share of our common stock immediately prior to the completion of this offering. The following table summarizes purchases of our Series A convertible preferred stock as described above by related parties:

Stockholder[1]	Series A Convertible Preferred Stock	Total Purchase Price
Third Rock Ventures V, L.P.[2]	41,250,000	$41,250,000[3]
Samsara BioCapital, L.P.[4]	10,500,000	$10,500,000
Entities affiliated with Biotechnology Value Fund[5]	7,500,000	$ 7,500,000
Invus Public Equities, L.P.	7,500,000	$ 7,500,000

(1) Additional details regarding these stockholders and their equity holdings are included in the section titled "Principal Stockholders."

(2) Entities affiliated with Third Rock Ventures beneficially own more than 5% of our outstanding capital stock. Dr. Tong and Dr. Ezekowitz, members of our board of directors, were designated to our board of directors by Third Rock Ventures and serve as Partner and Advisory Partner at Third Rock Ventures, respectively.

(3) $26,593,667 of the total purchase price was funded in cash and $14,656,333 was funded by the conversion of Third Rock Ventures V, L.P.'s convertible promissory notes (inclusive of principal and accrued interest).

(4) Samsara beneficially owns more than 5% of our outstanding capital stock. Mr. Bassan, a member of our board of directors, was designated to our board of directors by Samsara and is a Principal at Samsara.

(5) Represents (i) 2,968,200 shares of our Series A convertible preferred stock purchased by Biotechnology Value Fund II, L.P. (BVF II), (ii) 4,077,015 shares of our Series A convertible preferred stock purchased by Biotechnology Value Fund, L.P. (BVF) and (iii) 454,785 shares of our Series A convertible preferred stock purchased by Biotechnology Value Trading Fund OS LP (BVF Trading Fund OS and, together with BVF II and BVF, Biotechnology Value Fund). Entities affiliated with Biotechnology Value Fund collectively beneficially own more than 5% of our outstanding capital stock.

Series B Convertible Preferred Stock Financing

In 2023 and 2024, we issued and sold an aggregate of 121,657,452 shares of our Series B convertible preferred stock at a purchase price of $1.23297 per share for an aggregate purchase price of $150.0 million in multiple closings.

Every 8.6103 shares of our outstanding Series B convertible preferred stock will convert into approximately one share of our common stock immediately prior to the completion of this offering. The following table summarizes the shares of our Series B convertible preferred stock issued to our related parties:

Stockholder[1]	Series B Convertible Preferred Stock	Total Purchase Price
Third Rock Ventures VI, L.P.[2]	24,737,017	$ 30,499,999.86
Entities affiliated with RA Capital[3]	24,331,492	$ 29,999,999.72
Deep Track Biotechnology Master Fund, Ltd.	12,165,746	$ 14,999,999.86
Entities affiliated with Goldman[4]	12,165,746	$ 14,999,999.93
Samsara BioCapital, L.P.[5]	8,516,022	$ 10,499,999.66
Invus Public Equities, L.P.	6,082,873	$ 7,499,999.93
Entities affiliated with Biotechnology Value Fund[6]	4,055,248	$ 4,999,999.14

(1) Additional details regarding these stockholders and their equity holdings are included in the section titled "Principal Stockholders."

(2) Entities affiliated with Third Rock Ventures beneficially own more than 5% of our outstanding capital stock. Dr. Tong and Dr. Ezekowitz, members of our board of directors, were designated to our board of directors by Third Rock Ventures and serve as Partner and Advisory Partner at Third Rock Ventures, respectively.

(3) Represents (i) 14,598,896 shares of our Series B convertible preferred stock purchased by RA Capital Healthcare Fund, L.P. (RA Capital Healthcare) and (ii) 9,732,596 shares of our Series B convertible preferred stock purchased by RA Capital Nexus Fund III, L.P. (RA Capital Nexus and, together with RA Capital Healthcare, RA Capital). Dr. Simson, a member of our board of directors, was designated to our board of directors by RA Capital and is a Partner at RA Capital. Entities affiliated with RA Capital collectively beneficially own more than 5% of our outstanding capital stock.

(4) Represents (i) 2,846,638 shares of our Series B convertible preferred stock purchased by Special Situations 2022, L.P., (ii) 2,233,760 shares of our Series B convertible preferred stock purchased by West Street Life Sciences I, LP, (iii) 1,587,908 shares of our Series B convertible preferred stock purchased by WSLS Emp Onshore Investments, L.P., (iv) 1,560,292 shares of our Series B convertible preferred stock purchased by Broad Street Principal Investments LLC, (v) 598,990 shares of our Series B convertible preferred stock purchased by WSLS Emp Offshore Investments, L.P., (vi) 2,129,548 shares of our Series B convertible preferred stock purchased by WSLS Offshore Investments, SLP, and (vii) 1,208,610 shares of our Series B convertible preferred stock purchased by Special Situations 2022 Offshore Holdings II, L.P. (collectively, Goldman). Entities affiliated with Goldman collectively beneficially own more than 5% of our outstanding capital stock.

(5) Samsara beneficially owns more than 5% of our outstanding capital stock. Mr. Bassan, a member of our board of directors, was designated to our board of directors by Samsara and is a Principal at Samsara.

(6) Represents (i) 1,665,002 shares of our Series B convertible preferred stock purchased by BVF II, (ii) 2,196,680 shares of our Series B convertible preferred stock purchased by BVF and (iii) 193,566 shares of our Series B convertible preferred stock purchased by BVF Trading Fund OS. Entities affiliated with Biotechnology Value Fund collectively beneficially own more than 5% of our outstanding capital stock.

Agreements with Stockholders

Financing Agreements with Stockholders

In connection with our Series A and B convertible preferred stock financings, we entered into an investors' rights agreement and stockholders agreement containing registration rights, information rights, voting rights, and rights of first refusal, among other things, with certain holders of our convertible preferred stock and certain holders of our common stock, including holders of more than 5% of our capital stock and entities with which certain of our directors and officers are affiliated. Pursuant to our amended and restated investors' rights agreement (as amended, the investor rights agreement), entities affiliated with Biotechnology Value Fund and RA Capital were each granted the right to designate a board observer in a nonvoting capacity, which right will terminate upon the completion of this offering. These agreements will terminate upon the completion of this offering, except for the registration rights granted under the investor rights agreement, as more fully described in "Description of Capital Stock—Registration Rights."

Management Rights Letters

In connection with our Series A and B convertible preferred stock financings, we entered into management rights letters with certain purchasers of our convertible preferred stock, including holders of more than 5% of our capital stock and entities with which certain of our directors or officers are affiliated, pursuant to which such entities were granted certain management rights, including the right to consult with and advise our management on significant business issues, review our operating plans, examine our books and records and inspect our facilities. These management rights letters will terminate upon completion of this offering.

Side Letter with Goldman

In connection with our Series B convertible preferred stock financing, we entered into a side letter agreement (Goldman side letter) with entities affiliated with Goldman Sachs & Co. LLC (Goldman), which collectively hold more than 5% of our outstanding capital stock. Pursuant to the Goldman side letter, Goldman was granted the right to designate a board observer in a nonvoting capacity, which right will terminate upon the completion of this offering. Certain of our obligations under the Goldman side letter will remain in effect after the completion of this offering, including our obligations to defend, indemnify and hold Goldman harmless for any damages, liabilities, losses, taxes, fines, penalties and reasonable costs and expenses arising out of third-party or governmental claims related to Goldman's status as a securityholder, subject to certain limitations and exceptions.

Service Agreement with Third Rock Ventures

Third Rock Ventures, a beneficial owner of more than 5% of our outstanding capital stock, has provided us with certain consulting services, including without limitation, business, technical, financial, IT, and scientific advice related to our business pursuant to a service agreement with Third Rock Ventures, dated August 25, 2021 (TRV service agreement). Dr. Finer, our President, Chief Executive Officer and a member of our directors, is a Venture Partner at Third Rock Ventures. In addition, Dr. Tong, a member of our board of directors, and Dr. Ezekowitz, a member of our board of directors and our former interim Chief Medical Officer, were designated to our board of directors by Third Rock Ventures and are each affiliated with Third Rock Ventures. Dr. Ezekowitz served as our interim Chief Medical Officer from January 2022 to September 2024 and did not receive any cash compensation from us for his service as our former interim Chief Medical Officer, as his services were provided to us through the TRV service agreement. For the fiscal years ended December 31, 2022 and 2023, we incurred costs totaling $1.3 million and $0.3 million, respectively, for the services provided to us by Third Rock Ventures, which included, among other things, the services of Dr. Ezekowitz in his capacity as our former interim Chief Medical Officer. For the six months ended June 30, 2024, we incurred costs totaling $0.1 million for the services provided to us by Third Rock Ventures, which included, among other things, the services of Dr. Ezekowitz in his capacity as our former interim Chief Medical Officer. Drs. Tong and Ezekowitz did not receive any cash compensation from us for their services as members of our board of directors. Of the total fees we incurred under the TRV service agreement in the fiscal years ended December 31, 2022 and 2023,

$253,500 and $239,000, respectively, were attributed to Dr. Ezekowitz's support in his capacity as our former interim Chief Medical Officer. Of the total fees we incurred under the TRV service agreement during the six months ended June 30, 2024, $111,000 was attributed to Dr. Ezekowitz's support in his capacity as our former interim Chief Medical Officer. Additionally, as compensation for Dr. Ezekowitz's services as our former interim Chief Medical Officer, we granted him options to purchase 11,613 shares of our common stock during the year ended December 31, 2022, and 26,712 shares of our common stock during the year ended December 31, 2023, at exercise prices of $1.55 and $2.76 per share, respectively. During the six months ended June 30, 2024, we granted him options to purchase 23,227 shares of our common stock at an exercise price of $2.76 per share.

Employment Arrangements

We have entered into offer letter agreements with certain of our executive officers and granted stock options to our executive officers, as more fully described in the section titled "Executive Compensation."

Equity Grants

We have granted stock options and restricted stock awards to purchase shares of our common stock to certain of our executive officers and directors. For more information regarding the stock options granted to our executive officers and directors, see the sections titled "Executive Compensation" and "Director Compensation" included elsewhere in this prospectus.

Indemnification Agreements

In connection with this offering, we intend to enter into new agreements to indemnify our directors and executive officers. These agreements will, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our company or that person's status as a member of our board of directors or an executive officer to the maximum extent allowed under Delaware law.

Policies for Approval of Related Party Transactions

Our board of directors reviews and approves transactions with directors, executive officers, and holders of 5% or more of our voting securities and their affiliates, each a related party. Prior to this offering, the material facts as to the related party's relationship or interest in the transaction were disclosed to our board of directors prior to their consideration of such transaction, and the transaction was not considered approved by our board of directors unless a majority of the directors who are not interested in the transaction approved the transaction. Further, when stockholders are entitled to vote on a transaction with a related party, the material facts of the related party's relationship or interest in the transaction were disclosed to the stockholders, who must approve the transaction in good faith.

In connection with this offering, we adopted a written related party transactions policy that will provide that such transactions must be approved by our audit committee. This policy will become effective upon effectiveness of our registration statement. Pursuant to this policy, our audit committee has the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related parties in which the aggregate amount involved exceeds $120,000 (or, if less, 1% of the average of our total assets in a fiscal year) and in which a related party has a direct or indirect interest. For purposes of this policy, a related party will be defined as a director, executive officer, nominee for director, any security holder known by us to beneficially own more than 5% of any class of our voting securities, and their immediate family members.

PRINCIPAL STOCKHOLDERS

The following table sets forth, as of August 31, 2024, information regarding beneficial ownership of our common stock by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current directors and executive officers as a group.

The information in the following table is calculated based on 26,000,408 shares (including 707,885 shares of unvested restricted common stock subject to repurchase or forfeiture) of our common stock deemed to be outstanding before this offering and 36,937,908 shares of our common stock outstanding after this offering, assuming no exercise by the underwriters of their option to purchase additional shares of our common stock. The number of shares outstanding is based on the number of shares of our common stock outstanding (including 707,885 shares of unvested restricted common stock subject to repurchase or forfeiture) as of August 31, 2024, as adjusted to give effect to:

- the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 22,839,774 shares of our common stock immediately prior to the completion of this offering; and
- the sale of 10,937,500 shares of our common stock in this offering (assuming no exercise of the underwriters' option to purchase additional shares).

Each individual or entity shown on the table has furnished information with respect to beneficial ownership. Except as otherwise indicated below, the address of each officer, director and 5% stockholder listed below is c/o Septerna, Inc., 250 East Grand Avenue, South San Francisco, California 94080.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities as well as any shares of our common stock that the person has the right to acquire within 60 days of August 31, 2024 through the exercise of stock options or other rights. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them.

	Shares of Common Stock Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
5% or Greater Stockholders			
Entities affiliated with Third Rock Ventures[1]	8,718,047	33.5%	23.6%
Entities affiliated with RA Capital[2]	2,825,858	10.9%	7.7%
Samsara BioCapital, L.P.[3]	2,208,520	8.5%	6.0%
Invus Public Equities, L.P.[4]	1,577,514	6.1%	4.3%
Deep Track Biotechnology Master Fund, Ltd.[5]	1,412,929	5.4%	3.8%
Entities affiliated with Goldman[6]	1,412,925	5.4%	3.8%
Entities affiliated with Biotechnology Value Fund[7]	1,342,024	5.2%	3.6%

	Shares of Common Stock Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
Directors and Named Executive Officers			
Jeffrey Finer, M.D., Ph.D.(8)	930,767	3.6%	2.5%
Liz Bhatt, M.S., M.B.A.(9)	208,683	*	*
Samira Shaikhly(10)	36,811	*	*
Daniel Long, D.Phil.(11)	101,040	*	*
Uwe Klein, Ph.D.(12)	112,654	*	*
Jeffrey Tong, Ph.D.(1)	—	—	—
Abraham Bassan, M.S.	—	—	—
Bernard Coulie, M.D., Ph.D., M.B.A.(13)	6,677	*	*
Alan Ezekowitz, M.D., D. Phil.(14)	51,389	*	*
Shalini Sharp, M.B.A.(15)	6,677	*	*
Jake Simson, Ph.D.	—	—	—
All executive officers and directors as a group (13 persons)(16)	**1,516,394**	**5.8%**	**4.1%**

* Represents beneficial ownership of less than 1%.

(1) Consists of (i) 1,054,318 shares of common stock held by Third Rock Ventures V, L.P. (TRV V), (ii) 4,790,773 shares of common stock issuable upon conversion of Series A convertible preferred stock held by TRV V, and (iii) 2,872,956 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Third Rock Ventures VI, L.P. (TRV VI). The general partner of TRV V is Third Rock Ventures GP V, L.P. (TRV GP V). The general partner of TRV GP V is TRV GP V, LLC (TRV GP V LLC). The general partner of TRV VI is Third Rock Ventures GP VI, L.P. (TRV GP VI). The general partner of TRV GP VI is TRV GP VI, LLC (TRV GP VI LLC). Abbie Celniker, Ph.D., Robert Tepper, M.D., Reid Huber, Ph.D., Jeffrey Tong, Ph.D., Kevin Gillis, Neil Exter, and Cary Pfeffer, M.D. are the managing members of TRV GP V LLC and TRV GP VI LLC and collectively make voting and investment decisions with respect to shares held by TRV V and TRV VI. David Kaufman is also a managing member of TRV GP VI LLC and contributes to voting decisions with respect to shares held by TRV VI. Dr. Tong is a member of our board of directors. The principal address for the entities and individuals named in this paragraph is 201 Brookline Avenue, Suite 1401, Boston, Massachusetts 02215.

(2) Consists of (i) 1,695,515 shares of common stock issuable upon conversion of Series B convertible preferred stock held by RA Capital Healthcare Fund, L.P. (RA Healthcare) and (ii) 1,130,343 shares of common stock issuable upon conversion of Series B convertible preferred stock held by RA Capital Nexus Fund III, L.P. (RA Nexus). RA Capital Management, L.P. (RA Capital) is the investment manager for RA Healthcare and RA Nexus. The general partner of RA Capital is RA Capital Management GP, LLC (RA Capital GP), of which Peter Kolchinsky and Rajeev Shah are the managing members. RA Capital, RA Capital GP, Peter Kolchinsky and Rajeev Shah may be deemed to have voting and investment power over the shares held of record by RA Healthcare and RA Nexus. RA Capital, RA Capital GP, Peter Kolchinsky, and Rajeev Shah disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of RA Capital is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.

(3) Consists of 1,219,470 shares of common stock issuable upon conversion of Series A convertible preferred stock and 989,050 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Samsara BioCapital, L.P. (Samsara LP). Samsara BioCapital GP, LLC (Samsara LLC) is the general partner of Samsara LP and may be deemed to beneficially own the shares held by Samsara LP. Dr. Srinivas Akkaraju, MD, Ph.D. has the voting and investment power over the shares held by Samsara GP, and, accordingly, may be deemed to beneficially own the shares held by Samsara LP. Samsara LLC disclaims beneficial ownership in these shares except to the extent of its respective pecuniary interest therein. The business address of Dr. Akkaraju and each of the entities listed above is 628 Middlefield Road, Palo Alto, California 94301.

(4) Consists of 871,050 shares of common stock issuable upon conversion of Series A convertible preferred stock and 706,464 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Invus Public Equities, L.P. (IPE). Invus Public Equities Advisors, LLC (IPEA) controls IPE, as its general partner and accordingly, may be deemed to beneficially own the shares held by IPE. Invus Global Management, LLC (IGM) controls IPEA, as its managing member and accordingly, may be deemed to beneficially own the shares that IPEA may be deemed to beneficially own. Siren, L.L.C. (Siren) controls IGM, as its managing member and accordingly, may be deemed to beneficially own the shares that IGM may be deemed to beneficially own. Mr. Raymond Debbane, as the managing member of Siren, controls Siren and accordingly, may be deemed to beneficially own the shares that Siren may be deemed to beneficially own. The business address for IPE, IPEA, IGM, Siren and Mr. Raymond Debbane is 750 Lexington Ave, 30th Floor, New York, New York 10022.

(5) Consists of 1,412,929 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Deep Track Biotechnology Master Fund, Ltd (Deep Track Fund). Deep Track Capital, LP (Deep Track Manager) is the investment manager of Deep Track Fund. Deep Track Capital GP, LLC (Deep Track Partner) is the general partner of Deep Track Manager and David Kroin is the managing member of Deep Track Partner. The address of each of Deep Track Fund, Deep Track Manager, Deep Track Partner and Mr. Kroin is 200 Greenwich Ave, 3rd Floor, Greenwich, Connecticut 06830.

(6) Consists of (i) 259,428 shares of common stock issuable upon conversion of Series B convertible preferred stock held by West Street Life Sciences I, LP (WSLSI), (ii) 247,325 shares of common stock issuable upon conversion of Series B convertible preferred stock held by WSLS Offshore Investments, SLP (WSLSOI), (iii) 184,419 shares of common stock issuable upon conversion of Series B convertible preferred stock held by WSLS Emp Onshore Investments, L.P. (WSLS Onshore), (iv) 69,566 shares of common stock issuable upon conversion of Series B convertible preferred stock held by WSLS Emp Offshore Investments, L.P. (WSLS Offshore), (v) 181,212 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Broad Street Principal Investment LLC (BSPI), (vi) 330,608 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Special Situations 2022, L.P. (SSLP), and (vii) 140,367 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Special Situations 2022 Offshore Holdings II, L.P. (SSOH). Goldman Sachs & Co. LLC (Goldman Sachs), as the investment manager of WSLSI, WSLSOI, WSLS Onshore, and WSLS Offshore, may be deemed to have voting and investment power over the shares held of record by these entities. Bridge Street Opportunity Advisors, L.L.C. (Bridge Street), as the general partner of SSLP and SSOH, may be deemed to have voting and investment power over the shares held of record by these entities. Goldman Sachs & Co. LLC and Bridge Street are direct and indirect wholly-owned subsidiaries of The Goldman Sachs Group, Inc. (GS Group). GS Group is a public entity and its common stock is publicly traded on the New York Stock Exchange. The shares were acquired in the ordinary course of the holders' investment business and not for the purpose of resale or distribution. Goldman Sachs, Bridge Street or GSGroup may be deemed to beneficially own the securities held by WSLSI, WSLSOI, WSLS Onshore, WSLS Offshore, SSLP and SSOH. Goldman Sachs, Bridge Street and GS Group disclaim beneficial ownership of such securities except to the extent of its pecuniary interest therein. The address of GS Group, Goldman Sachs, Bridge Street, WSLSI, WSLS Onshore, WSLS Offshore, BSPI, SSLP and SSOH is 200 West Street, New York, New York 10282. The address of WSLSOI is 12E, Rue Guillaume Kroll, 1882 Luxembourg.

(7) Consists of (i) 473,504 shares of common stock issuable upon conversion of Series A convertible preferred stock and 255,122 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Biotechnology Value Fund, L.P. (BVF), (ii) 344,727 shares of common stock issuable upon conversion of Series A convertible preferred stock and 193,372 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Biotechnology Value Fund II, L.P. (BVF II), and (iii) 52,819 shares of common stock issuable upon conversion of Series A convertible preferred stock and 22,480 shares of common stock issuable upon conversion of Series B convertible preferred stock shares of common stock issuable upon conversion of convertible preferred stock held by Biotechnology Value Trading Fund OS LP (BVF Trading Fund OS, together with BVF and BVF II, the BVF Entities). BVF I GP LLC (BVF GP), as general partner of BVF, may be deemed to beneficially own the shares beneficially

owned by BVF. BVF II GP LLC (BVF II GP), as general partner of BVF II, may be deemed to beneficially own the shares beneficially owned by BVF II. BVF GP Holdings LLC (BVF GPH), as the sole member of BVF GP and BVF II GP, may be deemed to beneficially own the shares beneficially owned by BVF and BVF II. BVF Partners OS Ltd. (BVF Partners OS), as general partner of BVF Trading Fund OS, may be deemed to beneficially own the shares beneficially owned by BVF Trading Fund OS. BVF Partners L.P. (BVF Partners), as sole member of BVF Partners OS and investment manager of BVF, BVF II and BVF Trading Fund OS, may be deemed to beneficially own the shares beneficially owned by the BVF Entities. BVF Inc., as the general partner of BVF Partners, and Mark N. Lampert, as director and officer of BVF Inc., may be deemed to beneficially own the shares beneficially owned by BVF Entities. Each of BVF GP, BVF II GP, BVF Partners OS, BVF GPH, BVF Partners, BVF Inc., and Mark N. Lampert disclaims beneficial ownership of securities beneficially owned by the BVF Entities. The address of each of the entities listed above is 44 Montgomery Street, Suite 4000, San Francisco, CA 94104.

(8) Consists of (i) 754,907 shares of common stock (including unvested restricted common stock) and (ii) 175,860 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Dr. Finer.

(9) Consists of (i) 174,209 shares of common stock (including unvested restricted common stock) and (ii) 34,474 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Ms. Bhatt.

(10) Consists of 36,811 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Ms. Shaikhly.

(11) Consists of (i) 92,911 shares of common stock (including unvested restricted common stock) and (ii) 8,129 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Dr. Long.

(12) Consists of (i) 104,525 shares of common stock (including unvested restricted common stock) held by the Klein 2024 Revocable Trust dated February 25, 2024 (the Klein Trust) and (ii) 8,129 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Dr. Klein. Dr. Klein is a co-trustee of the Klein Trust and shares voting and dispositive power with respect to the shares held by the Klein Trust with his spouse. The address of the Klein Trust is 1254 33rd Avenue, San Francisco, CA 94122.

(13) Consists of 6,677 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Dr. Coulie.

(14) Consists of (i) 17,420 shares of common stock and (ii) 33,969 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Dr. Ezekowitz.

(15) Consists of 6,677 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024 held by Ms. Sharp.

(16) Consists of (i) 1,202,041 shares of common stock (including unvested restricted common stock) and (ii) 314,353 shares of common stock issuable upon the exercise of options exercisable within 60 days of August 31, 2024.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and the amended and restated bylaws, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. Copies of these documents have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will be in effect on the completion of this offering.

General

Upon filing of our amended and restated certificate of incorporation and the completion of this offering, our authorized capital stock will consist of 500,000,000 shares of our common stock, par value $0.001 per share, and 10,000,000 shares of preferred stock, par value $0.001 per share, all of which shares of preferred stock will be undesignated.

As of June 30, 2024, there were 3,163,020 shares of our common stock outstanding (including 784,550 shares of unvested restricted common stock subject to repurchase or forfeiture) and held of record by stockholders. This amount assumes the conversion of all outstanding shares of our convertible preferred stock into 22,839,774 shares of our common stock, which will occur immediately prior to the completion of this offering.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

Preferred Stock

Immediately prior to the completion of this offering, all outstanding shares of our convertible preferred stock will be converted into shares of our common stock. Upon the completion of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, and restrictions thereof. These rights, preferences, and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms, and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our Company or other corporate action. Immediately after completion of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Stock Options

As of June 30, 2024, 1,796,272 shares of our common stock were issuable upon the exercise of outstanding stock options under the 2021 Plan, at a weighted-average exercise price of $2.68 per share; no shares of our common stock were issuable upon exercise of outstanding stock options outside of our 2021 Plan; and 3,690,000 shares of our common stock were reserved for future issuance under the 2024 Plan, which will become effective on the date immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, as well as any future automatic annual increases in the number of shares of our common stock reserved for issuance under the 2024 Plan and any shares underlying outstanding stock awards granted under the 2021 Plan that expire or are repurchased, forfeited, cancelled, or withheld. For additional information regarding terms of our equity incentive plans, see the section titled "Executive Compensation—Employee Benefit and Equity Compensation Plans."

Registration Rights

Upon the completion of this offering, certain holders of our common stock, including those issuable upon the conversion of our preferred stock, will be entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of the investor rights agreement between us and the holders of our preferred stock. The investor rights agreement includes demand registration rights, short-form registration rights, and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Beginning six months after the effective date of this registration statement, certain holders of our common stock, including common stock issuable upon the conversion of shares of our preferred stock upon the completion of this offering, are entitled to demand registration rights. Under the terms of the investor rights agreement, upon the written request of stockholders holding at least 25% of the securities eligible for registration then outstanding to file a registration statement with respect to at least 25% of the securities eligible for registration then outstanding, having an anticipated aggregate offering price, net of related fees and expenses, of at least $5.0 million, we will be required to file a registration statement within 60 days of such request covering all securities eligible for registration that our stockholders request to be included in such registration. We are not required to effect any registration pursuant to this provision of the investor rights agreement (a) during the period that is estimated to be 60 days before and 180 days after the effective date of a registration statement that we initiate, (b) if we have already effected two registrations pursuant to such requests for registration on Form S-1 or (c) if the initiating holders propose to register securities that may be immediately registered on Form S-3. The right to have such shares registered on Form S-1 is further subject to other specified conditions and limitations.

Short-Form Registration Rights

Pursuant to the investor rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of stockholders holding at least 10% of the securities eligible for registration then outstanding to file a registration statement with respect to securities having an anticipated aggregate offering price, net of related fees and expenses, of at least $1.0 million, we will be required to file a Form S-3 registration statement within 45 days of such request covering all securities eligible for registration that our stockholders request to be included in such registration. We are not required to effect any registration pursuant to this provision of the investor rights agreement (a) during the period that is estimated to be 30 days before and 90 days after the effective date of a registration statement that we initiate or (b) if we have already effected two registrations pursuant to such requests for registration on Form S-3 within the twelve month period immediately preceding the date of such request. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Piggyback Registration Rights

Pursuant to the investor rights agreement, if we register any of our securities either for our own account or for the account of other security holders, the holders of our common stock, including common stock issuable upon the conversion of our preferred stock, are entitled to include their shares in the registration. Subject to certain exceptions contained in the investor rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

The investor rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short form registration rights granted under the investor rights agreement will terminate on the earliest to occur of (a) the closing of certain liquidation events, (b) the fifth anniversary of the completion of this offering or (c) at such time after this offering when the holders' shares may be sold without restriction pursuant to Rule 144 under the Securities Act (Rule 144) or another similar exemption under the Securities Act within a three month period.

Expenses

Ordinarily, other than underwriting discounts and commissions, we are generally required to pay all expenses incurred by us related to any registration effected pursuant to the exercise of these registration rights. These expenses may include all registration and filing fees, printing expenses, fees and disbursements of our counsel and reasonable fees and disbursements of a counsel for the selling security holders.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaws and Delaware Law

Some provisions of Delaware law, our amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

Our amended and restated certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of two-thirds or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action

by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our amended and restated bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our amended and restated certificate of incorporation and amended and restated bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated bylaws will limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our amended and restated bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures will provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our amended and restated bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to Certificate of Incorporation and Bylaws

Any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, and limitation of liability must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the amended and restated bylaws; and may also be amended by the affirmative vote of a majority of the outstanding shares entitled to vote on the amendment, voting together as a single class, except that the amendment of the provisions relating to notice of stockholder business and nominations and special meetings must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock

Our amended and restated certificate of incorporation provides for 10,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of

directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of our common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Section 203 of the Delaware General Corporation Law

Upon the completion of this offering, we will be subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding, for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge, or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges, or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Choice of Forum

Our amended and restated bylaws will provide that the Court of Chancery of the State of Delaware is the sole and exclusive forum for the following claims or causes of action under the Delaware statutory or common law: (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of, or a claim based on, a breach of a fiduciary duty owed by any of our current or former directors, officers, or other employees or stockholders to us or our stockholders, (iii) any action asserting a claim arising pursuant to any

provision of the DGCL or our amended and restated certificate of incorporation or amended and restated bylaws (including the interpretation, validity or enforceability thereof) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware, or (iv) any action asserting a claim governed by the internal affairs doctrine.

However, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all claims brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Consequently, this choice of forum provision would not apply to claims or causes of action brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction or the Securities Act. Moreover, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all claims brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

In addition, our amended and restated bylaws will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Additionally, our amended and restated bylaws will provide that any person or entity holding, owning or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to these provisions.

Limitations on Liability and Indemnification

See the section titled “Management—Limitations on Liability and Indemnification Agreements” included elsewhere in this prospectus.

Stock Exchange Listing

We have applied to list our common stock on the Nasdaq Global Market under the proposed trading symbol “SEPN,” and this offering is contingent upon obtaining approval of such listing.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Computershare Trust Company, N.A. The transfer agent’s address is 150 Royall Street, Canton, Massachusetts 02021.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock, including shares issued on the exercise of outstanding options, in the public market after this offering, or the possibility of these sales or issuances occurring, could adversely affect the prevailing market price for our common stock or impair our ability to raise equity capital. Although we have applied to list our common stock on the Nasdaq Global Market, we cannot assure you that there will be an active public market for our common stock.

Following the completion of this offering, based on our shares outstanding as of June 30, 2024, a total of 36,940,294 shares of our common stock will be outstanding, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, an eligible stockholder is entitled to sell such shares without complying with the manner of sale, volume limitation, or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. To be an eligible stockholder under Rule 144, such stockholder must not be deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and must have beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144, subject to the expiration of the lock-up agreements described below.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell shares on expiration of the lock-up agreements described below. Beginning 90 days after the date of this prospectus, within any three-month period, such stockholders may sell a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 369,402 shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares of our common stock from us; or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 under the Securities Act (Rule 701) generally allows a stockholder who was issued shares under a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days, to sell these shares in reliance on Rule 144, but without being required to comply with the public information, holding period, volume limitation, or notice provisions of Rule 144. Rule 701 also permits affiliates of our Company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required by that rule to wait until 90 days after the date of this prospectus before selling those shares under Rule 701, subject to the expiration of the lock-up agreements described below.

Lock-up Agreements

We, all of our directors and executive officers, and the holders of substantially all of our securities have entered into lock-up agreements with the underwriters and/or are subject to market standoff agreements or other agreements with us, which prevents us and them, subject among other things and subject to certain exceptions, from selling any of our securities for a period of not less than 180 days from the date of this prospectus without the prior written consent of J.P. Morgan Securities LLC. See the section titled "Underwriting."

Registration Rights

Upon the completion of this offering, certain holders of our securities will be entitled to various rights with respect to registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See the section titled "Description of Capital Stock—Registration Rights."

Equity Incentive Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register our shares issued or reserved for issuance under our equity incentive plans. The first such registration statement is expected to be filed soon after the date of this prospectus and will automatically become effective upon filing with the SEC. Accordingly, shares registered under such registration statement will be available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above. As of the date of this prospectus, we estimate that such registration statement on Form S-8 will cover approximately 4,059,402 shares.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following discussion is a summary of material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering. This discussion is based on the Code, Treasury Regulations promulgated thereunder, published rulings and administrative pronouncements of the U.S. Internal Revenue Service (IRS) and judicial decisions, all as in effect on the date hereof. These authorities are subject to differing interpretations and may change, possibly retroactively, resulting in U.S. federal income tax consequences different from those discussed below. We have not requested, and do not intend to request, a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This discussion is limited to non-U.S. holders who purchase our common stock pursuant to this offering and who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, does not address the potential application of the Medicare contribution tax on net investment income, the alternative minimum tax, or the special tax accounting rules under Section 451(b) of the Code, and also does not address any U.S. federal non-income tax consequences, such as estate or gift tax consequences, or any tax consequences arising under any state, local or non-U.S. tax laws. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a non-U.S. holder in light of such non-U.S. holder's particular circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to non-U.S. holders subject to special rules under the U.S. federal income tax laws, including:

- certain former citizens, or long-term residents of the United States;
- partnerships, S corporations, or other entities or arrangements treated as partnerships, pass-through entities, or disregarded entities (including hybrid entities) for U.S. federal income tax purposes (and investors therein);
- "controlled foreign corporations" within the meaning of Section 957(a) of the Code;
- "passive foreign investment companies" within the meaning of Section 1297(a) of the Code;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- banks, financial institutions, investment companies, insurance companies, brokers, dealers or traders in securities;
- real estate investment trusts or regulated investment companies;
- persons that have elected to mark securities to market;
- tax-exempt organizations (including private foundations), and governmental organizations, or international organizations;
- tax-qualified retirement plans;
- persons who acquire our common stock through the exercise of employee stock options or otherwise as compensation;
- persons who acquire our common stock through the exercise of warrants or conversion rights under convertible instruments;
- persons that hold our common stock as "qualified small business stock" under Section 1202 of the Code or "Section 1244 stock" under Section 1244 of the Code;
- qualified foreign pension funds as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;

- persons that elect to apply Section 1400Z-2 of the Code to gains recognized with respect to shares of our common stock;
- persons that acquired our common stock in a transaction subject to the gain rollover provisions of the Code (including Section 1045 of the Code);
- persons that own, or have owned, actually or constructively, more than 5% of our common stock;
- persons who have elected to mark securities to market; and
- persons holding our common stock as part of a hedging or conversion transaction or straddle, or synthetic security or a constructive sale, or other risk reduction strategy or integrated investment.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner in the partnership generally will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships holding our common stock and the partners in such partnerships are urged to consult their tax advisors about the particular U.S. federal income tax consequences to them of owning and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR NON-U.S. TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a corporation or any organization taxable as a corporation for U.S. federal income taxes that is not created or organized under the laws of the United States, any state thereof, or the District of Columbia; or
- a foreign trust or estate, the income of which is not subject to U.S. federal income tax on a net income basis.

Distributions on Our Common Stock

As described under “Dividend Policy,” we do not currently anticipate declaring or paying, for the foreseeable future, any distributions on our capital stock. However, if we were to distribute cash or other property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder’s tax basis in our common stock, but not below zero. Any excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under “—Gain on sale or other taxable disposition of our common stock” below.

Subject to the discussions below regarding effectively connected income, backup withholding and FATCA (as defined below), dividends paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends or such lower rate specified by an

applicable income tax treaty. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish us or our withholding agent with a valid IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E (in the case of entities), or other appropriate form, certifying such holder's qualification for the reduced rate. This certification must be provided to us or our withholding agent before the payment of the dividends and must be updated periodically. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our withholding agent, either directly or through other intermediaries.

If a non-U.S. holder holds our common stock in connection with the conduct of a trade or business in the United States, and dividends paid on our common stock are effectively connected with such holder's U.S. trade or business (and, if required by an applicable tax treaty, are attributable to such holder's permanent establishment or fixed base in the United States), the non-U.S. holder generally will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder generally must furnish a valid IRS Form W-8ECI (or applicable successor form), certifying that the dividends are effectively connected with the non-U.S. Holder's conduct of a trade or business within the United States to the applicable withholding agent.

However, any such effectively connected dividends paid on our common stock generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

Non-U.S. holders that do not provide the required certification on a timely basis, but that qualify for a reduced treaty rate, may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and FATCA (as defined below), a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized on the sale or other taxable disposition of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for a period or periods aggregating 183 days or more during the taxable year of the disposition, and certain other requirements are met; or
- our common stock constitutes a "United States real property interest" by reason of our status as a United States real property holding corporation (USRPHC) for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock, and our common stock is not "regularly traded" on an established securities market within the meaning of applicable U.S. Treasury regulations.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a flat 30% rate (or such lower rate specified by an applicable income tax treaty), but may be offset by certain U.S.- source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

Determining whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our worldwide real property interests and our other trade or business assets. We believe that we are not currently and we do not anticipate becoming a USRPHC for U.S. federal income tax purposes, although there can be no assurance we will not in the future become a USRPHC. Even if we are treated as a USRPHC, gain realized by a non-U.S. holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the non-U.S. holder owned, directly, indirectly and constructively, no more than 5% of our common stock at all times within the shorter of (a) the five-year period preceding the disposition or (b) the holder's holding period and (2) our common stock is "regularly traded" on an established securities market within the meaning of applicable U.S. Treasury regulations. There can be no assurance that our common stock qualifies as regularly traded on an established securities market for purposes of the rules described above. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating the amount of distributions on our common stock paid to such holder and the amount of any tax withheld with respect to those distributions. These information reporting requirements apply even if no withholding was required (because the distributions were effectively connected with the holder's conduct of a U.S. trade or business, or withholding was reduced or eliminated by an applicable income tax treaty) and regardless of whether such distributions constitute dividends. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Backup withholding, currently at a 24% rate, generally will not apply to payments to a non-U.S. holder of distributions on or the gross proceeds of a disposition of our common stock provided the non-U.S. holder furnishes the required certification for its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, or otherwise establishes an exemption, and if the payor does not have actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

Backup withholding is not an additional tax. If any amount is withheld under the backup withholding rules, the non-U.S. holder should consult with a U.S. tax advisor regarding the possibility of and procedure for obtaining a refund or a credit against the non-U.S. holder's U.S. federal income tax liability, if any.

Withholding on Foreign Entities

Sections 1471 through 1474 of the Code, which are commonly referred to as FATCA, impose a U.S. federal withholding tax of 30% on certain payments made to a "foreign financial institution" (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding certain U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. FATCA also generally imposes a U.S. federal withholding tax of 30% on certain payments made to a "non-financial foreign entity" (as specially defined under these rules) unless such entity provides the withholding agent a certification that it does not have any "substantial United States owners" or provides information identifying certain direct and

indirect U.S. owners of the entity or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. FATCA currently applies to dividends paid on our common stock and would have applied also to payments of gross proceeds from the sale or other disposition of our common stock. However, proposed regulations under FATCA provide for the elimination of the federal withholding tax of 30% applicable to gross proceeds of a sale or other disposition of from property of a type that can produce U.S. source dividends or interest. Under these proposed Treasury Regulations (which may be relied upon by taxpayers prior to finalization), FATCA withholding does not apply to gross proceeds from sales or other dispositions of our common stock.

Prospective investors are encouraged to consult with their tax advisors regarding the possible implications of FATCA on their investment in our common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF OWNING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT AND PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS.

UNDERWRITING

We are offering the shares of our common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, TD Securities (USA) LLC, Cantor Fitzgerald & Co. and Wells Fargo Securities, LLC are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of our common stock listed next to its name in the following table:

Name	Number of Shares
J.P. Morgan Securities LLC	
TD Securities (USA) LLC	
Cantor Fitzgerald & Co.	
Wells Fargo Securities, LLC	
Total	10,937,500

The underwriters are committed to purchase all the shares of our common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of $ per share. After the initial offering of the shares to the public, if all of the shares of our common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to 1,640,625 additional shares of our common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of our common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is $ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without Option to Purchase Additional Shares Exercise	With Full Option to Purchase Additional Shares Exercise
Per Share	$	$
Total	$	$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately $4.9 million. We have agreed to reimburse the underwriters for expenses relating to the clearance of this offering with the Financial Industry Regulatory Authority, Inc. in an amount up to $40,000.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not, subject to certain exceptions, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the SEC a registration statement under the Securities Act relating to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or (ii) enter into any swap, hedging, or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of common stock or any such other securities, or publicly disclose the intention to undertake any of the foregoing (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC for a period of 180 days after the date of this prospectus, other than the shares of our common stock to be sold in this offering.

The restrictions on our actions, as described above, do not apply to certain transactions, including (i) the issuance of shares of our common stock or securities convertible into or exercisable for shares of our common stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options (including net exercise) or the settlement of restricted stock units (RSUs) (including net settlement), in each case outstanding on the date of the underwriting agreement and described in this prospectus; (ii) grants of stock options, stock awards, restricted stock, RSUs, or other equity awards and the issuance of shares of our common stock or securities convertible into or exercisable or exchangeable for shares of our common stock (whether upon the exercise of stock options or otherwise) to our employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the closing date of this offering and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters; (iii) the issuance of up to 5% of the outstanding shares of our common stock, or securities convertible into, exercisable for, or which are otherwise exchangeable for, common stock, immediately following the closing date of this offering, in acquisitions or other similar strategic transactions, provided that such recipients enter into a lock-up agreement with the underwriters; or (iv) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of the underwriting agreement and described in this prospectus or any assumed benefit plan pursuant to an acquisition or similar strategic transaction.

Our directors and executive officers, and substantially all of our securityholders (such persons, the lock-up parties) have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not and may not cause any of their direct or indirect affiliates to, without the prior written consent of J.P. Morgan Securities LLC, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including without limitation, our common stock or such other securities which may be deemed to be beneficially owned by the lock-up party in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) (collectively with the common stock, the lock-up securities), (ii) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of the lock-up securities, in cash or otherwise, (iii) make any demand for or exercise any right with respect to the registration of any the lock-up securities, or (iv) publicly disclose the intention to do any of the foregoing.

Such persons or entities have further acknowledged that these undertakings preclude them from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (whether by the lock-up party or any other person) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise. Such persons or entities further confirm that they have furnished the representatives with the details of any transaction such persons or entities, or any of their respective affiliates, is a party to as of the date hereof, which transaction would have been restricted by the lock-up agreements if it had been entered into by such persons or entities during the restricted period.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (a) transfers or dispositions of lock-up securities: (i) as bona fide gifts or charitable contribution, or for bona fide estate planning purposes, (ii) by will or intestacy or any other testamentary document, (iii) to any member of the lock-up party's immediate family or to any trust for the direct or indirect benefit of the lock-up party or the immediate family of the lock-up party, or if the lock-up party is a trust, to a trustor, trustee or beneficiary of the trust or to the estate of a trustor, trustee or beneficiary of such trust, (iv) to a corporation, partnership, limited liability company, investment fund, or other entity (A) of which the lock-up party and its immediate family members are the legal and beneficial owner of all of the outstanding equity securities or similar interests, or (B) controlled by, or under common control or common investment management with, the lock-up party or the immediate family of the lock-up party, (v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv) above, (vi) in the case of a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control or common investment management with the lock-up party or its affiliates or (B) as part of a distribution to limited partners, members or stockholders of the lock-up party; (vii) by operation of law, (viii) to us from the lock-up party upon death or disability, or if the lock-up party is an employee of us, upon death, disability or termination of employment of such employee, (ix) as part of a sale of lock-up securities acquired (A) from the underwriters in this offering or (B) in open market transactions after the completion of this offering, (x) to us in connection with the vesting, settlement or exercise of RSUs, options, warrants or other rights to purchase shares of our common stock (including "net" or "cashless" exercise), including for the payment of exercise price and tax and remittance payments, or (xi) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction approved by our board of directors and made to all stockholders involving a change in control, provided that if such transaction is not completed, all such lock-up securities would remain subject to the restrictions in the immediately preceding paragraph; (b) exercise of the options, settlement of RSUs or other equity awards, or the exercise of warrants granted pursuant to plans described in this prospectus, provided that any lock-up securities received upon such exercise, vesting or settlement would be subject to restrictions similar to those in the immediately preceding paragraph; (c) the conversion of outstanding preferred stock, warrants to acquire preferred stock, or convertible securities into shares of our common stock or warrants to acquire shares of our common stock, provided that any common stock or warrant received upon such conversion would be subject to restrictions similar to those in the immediately preceding paragraph; and (d) the establishment or amendment by lock-up parties of trading plans under Rule 10b5-1 under the Exchange Act, provided that (1) such plan does not provide for the transfer of lock-up securities during the restricted period and (2) no filing by any party under the Exchange Act or other public announcement shall be made voluntarily in connection with the establishment or amendment of such trading plans pursuant to Rule 10b5-1, provided that if a filing under the Exchange Act or other public announcement is required, such announcement or filing shall include a statement to the effect that no transfer of Lock-Up Securities may be made under such trading plan pursuant to Rule 10b5-1 during the restricted period.

J.P. Morgan Securities LLC, in its sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We have applied to list our common stock on the Nasdaq Global Market under the symbol "SEPN," and this offering is contingent upon obtaining approval of such listing.

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of our common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involves the sale by the underwriters of a greater number of shares of our common stock than they are required to purchase in this offering, and purchasing shares of our common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount.

The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on Nasdaq, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;

- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for shares of our common stock, or that the shares will trade in the public market at or above the initial public offering price.

Other Relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (each a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

(i) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;

(ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or

(iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation. and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and to us that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not

been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which (i) has been approved by the Financial Conduct Authority or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provisions in Article 74 (transitional provisions) of the Prospectus Amendment etc (EU Exit) Regulations 2019/1234, except that the shares may be offered to the public in the United Kingdom at any time:

(i) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of underwriters for any such offer; or

(iii) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares shall require us or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of

the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Switzerland

This prospectus does not constitute an offer to the public or a solicitation to purchase or invest in any shares. No shares have been offered or will be offered to the public in Switzerland, except that offers of shares may be made to the public in Switzerland at any time under the following exemptions under the Swiss Financial Services Act (FinSA):

(i) to any person which is a professional client as defined under the FinSA;

(ii) to fewer than 500 persons (other than professional clients as defined under the FinSA), subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or

(iii) in any other circumstances falling within Article 36 FinSA in connection with Article 44 of the Swiss Financial Services Ordinance,

provided that no such offer of shares shall require the Company or any investment bank to publish a prospectus pursuant to Article 35 FinSA.

The shares have not been and will not be listed or admitted to trading on a trading venue in Switzerland.

Neither this document nor any other offering or marketing material relating to the shares constitutes a prospectus as such term is understood pursuant to the FinSA and neither this document nor any other offering or marketing material relating to the shares may be publicly distributed or otherwise made publicly available in Switzerland.

Notice to Prospective Investors in the Dubai International Financial Centre

This document relates to an Exempt Offer in accordance with the Markets Law, DIFC Law No. 1 of 2012, as amended. This document is intended for distribution only to persons of a type specified in the Markets Law, DIFC Law No. 1 of 2012, as amended. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority (DFSA) has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to Prospective Investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority, Financial Services Regulatory Authority (FSRA) or the DFSA.

Notice to Prospective Investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares of our common stock under this prospectus will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares of our common stock you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares of our common stock to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (SFO) of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong) (CO) or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to Prospective Investors in Singapore

Each underwriter has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each underwriter has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

(i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (SFA)) pursuant to Section 274 of the SFA;

(ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or

(iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

(iv) Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(v) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(vi) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) as specified in Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of shares of our common stock, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares of our common stock are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Notice to Prospective Investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to Prospective Investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations Regulations as issued by the board of the Saudi Arabian Capital Market Authority (CMA) pursuant to resolution number 3-123-2017 dated 27 December 2017, as amended (CMA Regulations). The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorised financial adviser.

Notice to Prospective Investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of us. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands) (BVI Companies), but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to Prospective Investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC (for such purposes, not including the Hong Kong and Macau Special Administrative Regions or Taiwan), except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to Prospective Investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder (FSCMA), and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (FETL). Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to Prospective Investors in Malaysia

No prospectus or other offering material or document in connection with the offer and sale of the shares has been or will be registered with the Securities Commission of Malaysia (Commission) for the Commission's approval pursuant to the Capital Markets and Services Act 2007. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Malaysia other than (i) a closed end fund approved by the Commission; (ii) a holder of a Capital Markets Services Licence; (iii) a person who acquires the shares, as principal, if the offer is on terms that the shares may only be acquired at a consideration of not less than RM250,000 (or its equivalent in foreign currencies) for each transaction; (iv) an individual whose total net personal assets or total net joint assets with his or her spouse exceeds RM3 million (or its equivalent in foreign currencies), excluding the value of the primary residence of the individual; (v) an individual who has a gross annual income exceeding RM300,000 (or its equivalent in foreign currencies) per annum in the preceding twelve months; (vi) an individual who, jointly with his or her spouse, has a gross annual income of RM400,000 (or its equivalent in foreign currencies), per annum in the preceding twelve months; (vii) a corporation with total net assets exceeding RM10 million (or its equivalent in a foreign currencies) based on the last audited accounts; (viii) a partnership with total net assets exceeding RM10 million (or its equivalent in foreign currencies); (ix) a bank licensee or insurance licensee as defined in the Labuan Financial Services and Securities Act 2010; (x) an Islamic bank licensee or takaful licensee as defined in the Labuan Financial Services and Securities Act 2010; and (xi) any other person as may be specified by the Commission; provided that, in the each of the preceding categories (i) to (xi), the distribution of the shares is made by a holder of a Capital Markets Services License who carries on the business of dealing in securities. The distribution in Malaysia of this prospectus is subject to Malaysian laws. This prospectus does not constitute and may not be used for the purpose of public offering or an issue, offer for subscription or purchase, invitation to subscribe for or purchase any securities requiring the registration of a prospectus with the Commission under the Capital Markets and Services Act 2007.

Notice to Prospective Investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorised to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to Prospective Investors in South Africa

Due to restrictions under the securities laws of South Africa, no "*offer to the public*" (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted) (the South African Companies Act) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a "*registered prospectus*" (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

Section 96 (1) (a) the offer, transfer, sale, renunciation or delivery is to:

(i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;

(ii) the South African Public Investment Corporation;

(iii) persons or entities regulated by the Reserve Bank of South Africa;

(iv) authorised financial service providers under South African law;

(v) financial institutions recognised as such under South African law;

(vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorised portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or

(vii) any combination of the person in (i) to (vi), or

Section 96 (1) (b) the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as "*advice*" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Notice to Prospective Investors in Israel

In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of our common stock under the Israeli Securities Law, 5728—1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728–1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions, or the Addressed Investors; or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions, or the "Qualified Investors." The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. We have not and will not take any action that would require us to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our shares of our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a condition to be offered shares of our common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued shares of our common stock; (iv) that the shares of our common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968 (A) for its own account, (B) for investment purposes only, and (C) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor's name, address and passport number or Israeli identification number.

LEGAL MATTERS

The validity of the shares of our common stock being offered in this prospectus will be passed upon for us by Goodwin Procter LLP, Redwood City, California. Cooley LLP, San Francisco, California, is representing the underwriters in this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements at December 31, 2022 and 2023, and for each of the two years in the period ended December 31, 2023, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 (File Number 333-282469) under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the completion of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at *www.sec.gov*.

SEPTERNA, INC.

INDEX TO FINANCIAL STATEMENTS

Financial Statements as of and for the Years Ended December 2022 and 2023

Unaudited Interim Condensed Financial Statements as of December 31, 2023 and June 30, 2024 and for the Six Months Ended June 30, 2023 and 2024

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
Septerna, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Septerna, Inc. (the Company) as of December 31, 2022 and 2023, the related statements of operations and comprehensive (loss) income, convertible preferred stock and stockholders' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2023, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2023.

San Mateo, California
August 2, 2024, except for the eleventh paragraph to Note 1, as to which the date is
October 21, 2024

SEPTERNA, INC.

Balance Sheets

(In thousands, except for share and per share data)

	As of December 31,	
	2022	2023
Assets		
Current assets:		
Cash and cash equivalents	$ 30,607	$ 88,483
Accounts receivable	—	151
Other receivable related to sale of non-financial asset	—	22,625
Prepaid expenses and other current assets	1,283	1,419
Total current assets	31,890	112,678
Property and equipment, net	2,403	4,665
Operating lease right-of-use asset	702	12,522
Restricted cash	862	905
Other non-current assets	262	97
Total assets	$ 36,119	$130,867
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 3,071	$ 2,637
Accrued expenses and other current liabilities	1,762	4,277
Operating lease liability, current	710	—
Total current liabilities	5,543	6,914
Operating lease liability, non-current	—	12,566
Other non-current liabilities	83	546
Total liabilities	5,626	20,026
Commitments and contingencies (Note 7)		
Convertible preferred stock:		
Series A convertible preferred stock, $0.001 par value per share; 100,000,000 and 75,000,000 shares authorized at December 31, 2022 and 2023, respectively; 75,000,000 shares issued and outstanding as of December 31, 2022 and 2023; liquidation preference of $75,000 at December 31, 2022 and 2023	74,694	74,694
Series B convertible preferred stock, $0.001 par value per share; no shares authorized issued or outstanding at December 31, 2022; 121,657,452 shares authorized at December 31, 2023; 60,828,720 shares issued and outstanding as of December 31, 2023; liquidation preference of $75,000 at December 31, 2023	—	74,521
Stockholders' deficit:		
Common stock, $0.001 par value per share, 150,000,000 and 260,590,689 shares authorized at December 31, 2022 and 2023, respectively; 3,181,829 shares and 3,168,134 shares issued and outstanding at December 31, 2022 and 2023, respectively; 1,527,641 and 1,002,044 shares subject to repurchase as of December 31, 2022 and 2023, respectively	3	3
Additional paid-in capital	6,552	8,199
Accumulated deficit	(50,756)	(46,576)
Total stockholders' deficit	(44,201)	(38,374)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 36,119	$130,867

The accompanying notes are an integral part of these financial statements.

SEPTERNA, INC.

Statements of Operations and Comprehensive (Loss) Income

(In thousands, except for share and per share data)

	Years Ended December 31,	
	2022	2023
Revenue	$ —	$ 151
Operating expenses (income):		
Research and development	22,044	35,979
General and administrative	5,923	9,722
Gain on sale of non-financial asset	—	(47,625)
Total operating expenses (income)	27,967	(1,924)
(Loss) income from operations	(27,967)	2,075
Other income, net:		
Interest income	291	2,786
Other income, net	—	10
Total other income, net	291	2,796
(Loss) income before provision for income taxes	(27,676)	4,871
Provision for income taxes	—	691
Net (loss) income and comprehensive (loss) income	$ (27,676)	$ 4,180
Net (loss) income attributable to common stockholders	$ (27,676)	$ 567
Net (loss) income per share attributable to common stockholders:		
Basic	$ (19.26)	$ 0.29
Diluted	$ (19.26)	$ 0.29
Weighted-average shares outstanding used in computing net (loss) income per share attributable to common stockholders:		
Basic	1,436,875	1,928,586
Diluted	1,436,875	2,177,124

The accompanying notes are an integral part of these financial statements.

SEPTERNA, INC.

Statements of Convertible Preferred Stock and Stockholders' Deficit

(In thousands, except for share data)

	Convertible Preferred Stock				Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Series A		Series B						
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at December 31, 2021	45,000,000	$44,725	—	$ —	2,235,365	$ 2	$ 5,026	$ (23,080)	$ (18,052)
Issuance of Series A Convertible Preferred Stock, net of issuance costs of $31	30,000,000	29,969	—	—	—	—	—	—	—
Issuance of restricted common stock	—	—	—	—	952,330	—	—	—	—
Vesting of restricted common stock	—	—	—	—	—	1	6	—	7
Repurchase of unvested restricted common stock	—	—	—	—	(5,866)	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	1,520	—	1,520
Net loss	—	—	—	—	—	—	—	(27,676)	(27,676)
Balance at December 31, 2022	75,000,000	74,694	—	—	3,181,829	3	6,552	(50,756)	(44,201)
Issuance of Series B Convertible Preferred Stock, net of issuance costs of $479	—	—	60,828,720	74,521	—	—	—	—	—
Vesting of restricted common stock	—	—	—	—	—	—	27	—	27
Repurchase of unvested restricted common stock	—	—	—	—	(13,695)	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	1,620	—	1,620
Net income	—	—	—	—	—	—	—	4,180	4,180
Balance at December 31, 2023	75,000,000	$74,694	60,828,720	$74,521	3,168,134	$ 3	$ 8,199	$ (46,576)	$ (38,374)

The accompanying notes are an integral part of these financial statements.

SEPTERNA, INC.

Statements of Cash Flows

(In thousands)

	Years Ended December 31,	
	2022	2023
Cash flows from operating activities:		
Net (loss) income	$ (27,676)	$ 4,180
Adjustments to reconcile net (loss) income to net cash used in operating activities:		
Depreciation and amortization	577	848
Gain on sale of non-financial asset	—	(47,625)
Non-cash operating lease expense	530	807
Stock-based compensation	1,520	1,620
Loss on disposal of property and equipment	—	30
Deferred income tax	—	491
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(1,025)	(136)
Accounts receivable	—	(151)
Other non-current assets	244	165
Accounts payable	1,726	(653)
Accrued expenses and other current liabilities	1,374	2,471
Operating lease, net	(573)	(770)
Net cash used in operating activities	(23,303)	(38,723)
Cash flows from investing activities:		
Purchases of property and equipment	(1,289)	(2,878)
Proceeds from sale of non-financial asset	—	25,000
Net cash (used in) provided by investing activities	(1,289)	22,122
Cash flows from financing activities:		
Proceeds from issuance of restricted common stock	82	—
Repurchases of forfeited restricted common stock	—	(1)
Proceeds from issuance of Series A convertible preferred stock, net of issuance costs	29,969	—
Proceeds from issuance of Series B convertible preferred stock, net of issuance costs	—	74,521
Net cash provided by financing activities	30,051	74,520
Net increase in cash, cash equivalents and restricted cash	5,459	57,919
Cash, cash equivalents and restricted cash, beginning of year	26,010	31,469
Cash, cash equivalents and restricted cash, end of year	$ 31,469	$ 89,388
Supplemental cash flow information:		
Cash paid for income taxes	$ —	$ 75
Supplemental disclosure for noncash investing and financing activities:		
Right-of-use asset obtained in exchange for operating lease liability	$ 611	$ 12,579
Other receivable related to sale of non-financial asset	$ —	$ 22,625
Property and equipment held in accounts payable and accrued expenses	$ —	$ 262

The accompanying notes are an integral part of these financial statements.

SEPTERNA, INC.

Notes to Financial Statements

1. Organization

Description of the Business

Septerna, Inc. ("Septerna" or the "Company") is a clinical-stage biotechnology company pioneering a new era of G protein-coupled receptor ("GPCR") oral small molecule drug discovery powered by its proprietary Native Complex Platform™. The Company's industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of its deep pipeline of product candidates focused on treating patients in three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases.

The Company's proprietary Native Complex Platform™ replicates the natural structure, function, and dynamics of GPCRs outside of cells at an industrial scale for, as the Company believes, the first time. The Company's foundational technologies enable it to isolate, purify, and reconstitute full-length, properly folded GPCR proteins within ternary complexes with ligands and transducer proteins in a lipid bilayer that mimics the cell membrane. The Company then applies state-of-the-art discovery tools and technologies to these defined and tunable protein complexes to structurally design, screen for, and optimize potential product candidates. Leveraging its platform, the Company has transformed GPCR oral small molecule drug discovery to an industrialized and iterative structure-based drug design approach to expand the landscape of druggable GPCR targets with novel oral small molecule medicines for patients. The Company's Native Complex Platform™ is designed to enable it to target certain GPCRs for the first time, uncover novel binding pockets for validated receptors, and pursue a wide spectrum of pharmacologies, including agonists, antagonists, and allosteric modulators, to affect GPCR signaling in different ways to achieve desired therapeutic effects.

The Company was incorporated in Delaware in December 2019, under the name GPCR NewCo, Inc. In June 2021, the Company changed its name to Septerna, Inc. The Company is headquartered in South San Francisco, California.

Liquidity and Capital Resources

The accompanying financial statements have been prepared assuming the Company will continue as a going concern, which assumes that the Company will realize its assets and satisfies its liabilities in the normal course of business. The Company is subject to risks inherent in operating an early-stage biotechnology business. These risks include, but are not limited to, dependence on the development of marketable products, the ability to attract, retain, and motivate qualified personnel, rapid technological changes and the rapidly evolving nature of the biotechnology industry.

The Company has historically financed its operations primarily through the issuances of convertible promissory notes and convertible preferred stock. In November 2021, the Company entered into a total of $100.0 million of Series A convertible preferred stock financing which was divided into two tranches. The initial tranche was completed in November 2021 for net proceeds of $44.7 million, of which $30.0 million was received in cash, net of issuance costs, and $14.7 million was for the conversion of the then outstanding convertible promissory notes plus accrued interest. In November 2022, the Company executed the second tranche for net cash proceeds of $30.0 million. In June 2023, the Company entered into a total of $150.0 million of Series B Convertible Preferred Stock financing, which was divided into two tranches of equal amounts. The first tranche, which was the issuance of $75.0 million of Series B Convertible Preferred Stock, was completed in July 2023 for net proceeds of $74.5 million (see Note 8).

The second tranche, which is the issuance of the remaining $75.0 million, was completed in May 2024 for net proceeds of $74.9 million (see Note 8). Upon issuance of the Series B Convertible Preferred Stock, the Company also amended the Series A Preferred Stock agreement to cancel the remaining 25.0 million unissued shares of Series A Convertible Preferred Stock originally authorized under the agreement.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

During the year ended December 31, 2023, the Company recorded a gain totaling $47.6 million for the sale of an in-progress research and development ("IPR&D") asset related to a GPCR program (see Note 4) and $0.2 million in revenue related to research services (see Note 5) resulting in net income of $4.2 million. Management expects to incur net losses for the foreseeable future as it conducts research and development. To date, none of the Company's product candidates have been approved by the U.S. Food and Drug Administration ("FDA") for commercial sale and, therefore, the Company has not generated any revenue from product sales.

Other than the income generated during the year ended December 31, 2023, the Company has experienced net losses from operations and negative cash flows from operating activities and capital expenditures since inception and had an accumulated deficit of $46.6 million as of December 31, 2023. The Company believes its cash and cash equivalents of $88.5 million as of December 31, 2023, together with (i) the receipt of the remaining $22.6 million in the first half of 2024 related to the gain recognized during the year ended December 31, 2023 and (ii) the net proceeds from the issuance of its second tranche of Series B Convertible Preferred Stock of $74.9 million received in May 2024 (see Note 8) will be sufficient to fund the Company's operations for, at least, twelve months from the date of issuance of the financial statements.

The Company will need substantial additional funding to support its continuing operations and pursue its development strategy. Until such time as the Company can generate significant revenue from commercial sales of its product candidates, if ever, management may seek additional funding through the issuance of preferred stock or common stock, debt financings, or licensing arrangements or collaborations/partnerships with other companies. The amount and timing of future funding requirements will depend on many factors, including the pace and results of clinical development efforts for the Company's product candidates and other research, development and manufacturing activities. Management may not be able to raise additional capital on terms favorable for or acceptable to the Company, or at all. Any failure to raise capital as and when needed would compromise the Company's ability to execute on its business plan and may cause the Company to significantly delay, scale back or discontinue the research and development of some of its programs or curtail any efforts to expand its product pipelines and will materially harm its business, financial position and results of operations.

Since its founding, the Company has devoted substantially all of its resources to organizing and staffing the Company, business planning, raising capital, developing its proprietary platform and structure-based drug discovery platform, identifying and discovering its product candidates, establishing its intellectual property portfolio, conducting research and preclinical studies, including Investigational New Drug (IND)-enabling studies, initiating and conducting clinical trials, establishing arrangements with third parties for the manufacture of its product candidates and related raw materials, and providing general and administrative support for these operations.

Reverse Stock Split

On October 17, 2024, the Company's board of directors approved a 1-for-8.6103 reverse stock split of its issued and outstanding shares of common stock, which was effected on October 18, 2024. Upon the effectiveness of the reverse stock split, (i) all shares of outstanding common stock were adjusted; (ii) the conversion ratio of the convertible preferred stock was adjusted; (iii) the number of shares of common stock for which each outstanding option to purchase common stock is exercisable were adjusted; and (iv) the exercise price of each outstanding option to purchase common stock was adjusted. All of the outstanding common stock share numbers (including shares of common stock subject to the Company's options and as converted for the outstanding convertible preferred stock), share prices, exercise prices and per share amounts contained in the financial statements have been retroactively adjusted in the financial statements to reflect this reverse stock split for all periods presented. The par value per share and the authorized number of shares of common stock and preferred stock were not adjusted as a result of the reverse stock split. The number of authorized shares has not changed.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), stated in U.S. dollars and include all adjustments necessary for the fair presentation of the Company's financial statements as of December 31, 2022 and 2023, and for the years then ended. Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification and Accounting Standards Updates ("ASUs"), of the Financial Accounting Standards Board ("FASB").

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures at the date of the financial statements and reported amounts of expenses during the reporting periods. These estimates form the basis for judgments the Company makes about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company bases its estimates using historical experience, Company forecasts and future plans, current economic conditions, and information from third-party professionals that management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities and recorded amounts of expenses that are not readily apparent from other sources and adjusts those estimates and assumptions when facts and circumstances dictate. Estimates are used in accounting for, among other things, useful lives of property and equipment, the rate used in determining the present value of lease payments, fair value of assets and liabilities, research and development accruals, the fair value of common stock and stock options, the allocation of a revenue contract's transaction price to each distinct performance obligation on a relative standalone selling price basis, uncertain tax positions and the valuation allowance for deferred income tax assets. Actual results may differ from these estimates and assumptions.

The Company utilizes estimates and assumptions in determining the fair value of its common stock, including stock-based awards. The Company has granted stock options at exercise prices that represented the fair value of its common stock on the specific grant dates. The Company utilized various valuation methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately Held Company Equity Securities Issued as Compensation, to estimate the fair value of its common stock. Each valuation methodology includes estimates and assumptions that require the Company's judgment. These estimates and assumptions include a number of objective and subjective factors, including external market conditions, the prices at which the Company sold shares of convertible preferred stock, the superior rights and preferences of the convertible preferred stock senior to the Company's common stock at the time, and a probability analysis of various liquidity events, such as a public offering or sale of the Company, under differing scenarios. Changes to the key assumptions used in the valuations could result in different fair values of common stock at each valuation date.

The Company's results can also be affected by economic, political, legislative, regulatory and legal actions. Economic conditions, such as recessionary trends, inflation, interest, changes in regulatory laws and monetary exchange rates, and government fiscal policies, can have a significant effect on operations. While the Company maintains reserves for anticipated liabilities, the Company could be affected by civil, criminal, regulatory or administrative actions, claims or proceedings.

Segment Reporting

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the chief operating decision maker ("CODM"), in deciding how to

allocate resources to an individual segment and in assessing performance. The Company's CODM is its chief executive officer. The Company has determined it operates in one segment. As of December 31, 2022 and 2023, all of the Company's property and equipment was maintained in the United States. For the year ended December 31, 2023, all of the Company's revenue was generated and incurred in the United States.

Risks and Uncertainties

Financial instruments, which potentially subject the Company to a concentration of credit risk, consist primarily of cash and cash equivalents and accounts receivable. The Company invests its cash equivalents in money market funds and limits its credit risk by placing its cash and cash equivalents with banks and institutions that are highly creditworthy. Such deposits may be in excess of the Federal Deposit Insurance Corporation ("FDIC") insured limits. The Company is exposed to credit risk in the event of default by the financial institutions holding its cash and cash equivalents to the extent recorded in the balance sheet.

The primary focus of the Company's investment strategy is to preserve capital and meet liquidity requirements. Management believes that the Company is not exposed to significant credit risk due to the high-credit-quality financial institutions in which those deposits are held. The Company has not experienced any losses on its cash and cash equivalents since inception. The Company has no significant off-balance sheet concentrations of credit risk.

The Company is subject to all of the risks inherent in an early-stage biotechnology company. These risks include, but are not limited to, limited management resources, efficacy of product candidates, intense competition, and dependence upon the availability of cash to sustain operations.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with original maturities of 90 days or less from the date of purchase to be cash equivalents. Cash equivalents are reported at fair value. At December 31, 2022 and 2023, the Company's cash equivalents are all held in money market funds. As of the balance sheet date, and periodically throughout the year, the Company has maintained balances in various operating accounts in excess of the FDIC insured limits.

Restricted cash is comprised of cash that is restricted as to withdrawal or use under the terms of certain contractual agreements. In connection with the Company's lease agreement (see Note 6), the Company is required to maintain a collateral account to secure a letter of credit issued to its landlord. The collateral account is classified as restricted cash on the Company's balance sheets.

The Company's cash, cash equivalents and restricted cash consisted of the following (in thousands):

	As of December 31,	
	2022	2023
Cash and cash equivalents	$30,607	$88,483
Restricted cash	862	905
Cash, cash equivalents, and restricted cash	$31,469	$89,388

Accounts Receivable and Other Receivables

The Company recognizes a receivable when the Company has an unconditional right to payment, which is generally at the time of delivery of assets, or at the time services are rendered.

An allowance for expected credit losses over the life of the receivables is reserved for based on a combination of historical experience, aging analysis, current economic trends and information on specific accounts, with related amounts recorded as a reserve against revenue recognized. The reserve is re-evaluated on a regular basis and adjusted as needed. Once a receivable is deemed to be uncollectible, such balance is charged against the reserve. No allowance for credit losses was recorded during the year ended December 31, 2023.

As of December 31, 2023, the Company's accounts receivable and other receivable related to sale of non-financial asset balances were entirely attributed to Vertex Pharmaceuticals Incorporated ("Vertex") (see Note 4 and Note 5). The Company did not have accounts receivable as of December 31, 2022.

Property and Equipment, Net

Property and equipment is recorded at cost, subject to adjustments for impairments, less accumulated depreciation. The Company depreciates property and equipment using the straight-line method over the estimated useful lives of the respective assets, as follows:

Lab equipment	5 years
Furniture and fixtures	5 years
Office equipment	5 years
Computer Equipment	3 years
Leasehold improvements	Shorter of remaining lease term or estimated useful life

Depreciation or amortization begins at the time the asset is placed in service. Maintenance and repairs that do not improve or extend the life of the respective asset are charged to expense as incurred. Upon disposal of assets, the cost and related accumulated depreciation is removed from the balance sheet and the resulting gain or loss is reflected in the statements of operations and comprehensive (loss) income within other income, net.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets for impairment, primarily its property and equipment, whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount of each asset to the undiscounted expected future cash flows the asset is expected to generate over its remaining life. An impairment loss would be recognized when the estimated undiscounted future cash flows expected to result from the use of the asset or asset group and its eventual disposition are less than its carrying amount. Impairment, if any, is measured as the amount by which the carrying amount of a long-lived asset or asset group exceeds its fair value. There were no impairments of the Company's long-lived assets for the years ended December 31, 2022 and 2023.

Leases

The Company accounts for its leases in accordance with FASB Accounting Standards Codification ("ASC") 842, *Leases* ("ASC 842"). The Company adopted ASC 842 on January 1, 2021, prior to entering into the lease agreement for its office and research and development space. At inception of a contract, the Company determines whether an arrangement is or contains a lease. For each lease, the Company determines the classification as either an operating lease or a financing lease. Lease recognition occurs at the lease commencement date and lease liability amounts are determined based on the present value of lease payments over the lease term. The lease term may include options to extend or terminate the lease only when it is reasonably certain that the Company will exercise that option.

The Company uses its incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments if the Company's leases do not provide an implicit rate. The Company determines its incremental borrowing rate based on the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment. Right-of-use assets represent the Company's right to use underlying assets for the lease term and operating lease liabilities represent the Company's obligation to make lease payments under the lease. Right-of-use assets also include any lease payments made prior to the commencement date and exclude lease incentives received.

The Company elected to apply the practical expedient of combining lease and non-lease components for the real estate lease asset class. Fixed lease payments on operating leases are recognized as lease expense over the expected term of the lease on a straight-line basis. Variable lease expenses that are not considered fixed are recognized as incurred.

In addition, the Company elected the short-term lease practical expedient that allows the lessee to not record a lease liability and right-of-use asset for all leases with a term of 12 months or less. See Note 6 for additional information on the Company's leases.

Convertible Preferred Stock

The Company records all shares of convertible preferred stock at their respective fair values on the dates of issuance, less issuance costs. In the event of a deemed liquidation event, such as a change of control of the Company, proceeds received from the sale of such shares will be distributed in accordance with the liquidation preferences set forth in the Company's certificate of incorporation unless the holders of the convertible preferred stock have converted their shares of convertible preferred stock into shares of common stock. Convertible preferred stock is therefore classified outside of stockholders' deficit on the balance sheet as events triggering redemption are not solely within the Company's control.

The Company has not adjusted the carrying values of its convertible preferred stock to the liquidation preferences because of the uncertainty of whether or when such an event would occur. As of December 31, 2022 and 2023, it was not probable that such a redemption would occur.

Revenue Recognition

The Company generated revenue for the year ended December 31, 2023 from service revenue for research activities performed related to an agreement with Vertex (see Note 5). The Company considers revenue to be earned when all of the following criteria are met: (i) the Company has a contract with a customer that creates enforceable rights and obligations; (ii) promised products or services are identified; (iii) the transaction price, or the amount the Company expects to receive, including an estimate of uncertain amounts subject to a constraint to ensure revenue is not recognized in an amount that would result in a significant reversal upon resolution of the uncertainty, is determinable; (iv) and the Company has transferred control of the promised items to the customer. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in the contract. The transaction price for the contract is measured as the amount of consideration the Company expects to receive in exchange for the goods and services expected to be transferred. When a contract contains variable consideration and the variable consideration is constrained to the extent that it is not probable that it will be received, it is excluded from the transaction price. A contract's transaction price is allocated to each distinct performance obligation on a relative standalone selling price basis and recognized as revenue when, or as, control of the distinct good or service is transferred.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

During the year ended December 31, 2023, the Company's revenue was entirely attributable to Vertex. The Company did not record revenue during the year ended December 31, 2022.

Sale of Non-Financial Assets

Sales of non-financial assets that are outside the scope of the Company's ordinary activities are accounted for under ASC 610-20, *Other Income - Gains and Losses from the Derecognition of Non-financial Assets* ("ASC 610-20"). Pursuant to ASC 610-20, the Company applies the guidance in ASC 606, *Revenue from Contracts with Customers* ("ASC 606"), to determine if a contract exists, identify the distinct non-financial assets, and determine when control transfers and, therefore, when to derecognize the non-financial asset. Additionally, the Company applies the measurement principles of ASC 606 to determine the amount of consideration, if any, to include in the calculation of the gain or loss for the non-financial asset.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist primarily of employee-related costs, including salaries, benefits and stock-based compensation for employees engaged in research and development activities, costs related to research activities, preclinical studies, production of preclinical materials, information technology-related costs, allocated overhead costs including facility-related expenses, contract manufacturing, consulting fees, costs related to laboratory operations and fees paid to other entities that conduct certain research and development activities on the Company's behalf. Payments made prior to the receipt of goods and services to be used in research and development are deferred and recognized as expense in the period in which the related goods are received or services are rendered.

The Company has entered into various agreements with outsourced contract manufacturing and development vendors. The Company estimates accrued research and development expenses as of each balance sheet date based on facts and circumstances known at that time. The Company periodically confirms the accuracy of its estimates with internal management personnel and external service providers, and makes adjustments, if necessary. Research and development accruals are estimated based on the level of services performed, progress of the studies, including the phase or completion of events, and contracted costs. The estimated costs of research and development services provided, but not yet invoiced, are included in accrued expenses on the balance sheets. If the actual timing of the performance of services or the level of effort varies from the original estimates, the Company will adjust the accrual accordingly. Payments made under these arrangements in advance of the performance of the related services are recorded as prepaid expenses and other current assets until the services are rendered.

Patent Expenses

Costs to secure and maintain patents covering the Company's technology and product candidates are expensed as incurred and are classified as general and administrative expenses in the statements of operations and comprehensive (loss) income.

Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of

observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3—Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Fair Value of Financial Instruments

The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, which are required to be recorded at fair value, the Company considers the principal or most advantageous market in which to transact and the market-based risk. The carrying values of the Company's financial instruments, which include cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued expenses, approximate their fair values due to their relatively short maturities.

Stock-Based Compensation

Stock-based compensation expense related to stock options and restricted stock awards granted to employees and non-employees is recognized based on the grant-date fair value of the awards. The fair value of stock options is determined using the Black Scholes option pricing model on the date of grant. The fair value of restricted stock awards is determined using the estimated fair value of the Company's common stock on the date of grant.

The fair value of the Company's common stock is determined by the Company's Board of Directors with the assistance of management and an independent third-party valuation specialist. The valuation methodologies used to determine the fair value of the Company's common stock utilize certain assumptions including probability weighting of events, volatility, time to liquidation, a risk-free interest rate and an assumption for a discount for lack of marketability. In determining the fair value of the Company's common stock, the methodologies used to estimate the enterprise value of the Company were performed using methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants Technical Practice Aid, "*Valuation of Privately Held Company Equity Securities Issued as Compensation,"* to estimate the fair value of its common stock. Each valuation methodology includes estimates and assumptions that require management judgment. These estimates and assumptions include a number of objective and subjective factors, including external market conditions, the prices at which the Company sold shares of convertible preferred stock, the superior rights and preferences of the convertible preferred stock senior to the Company's common stock at the time, and a probability analysis of various liquidity events, such as a public offering or sale of the Company, under different scenarios. Changes to the key assumptions used in the valuations could result in different fair values of common stock at each valuation date.

For stock-based awards with service conditions only, the Company recognizes stock-based compensation expense on a straight-line basis over the requisite service period, which is generally the vesting term of the award

of four years. For stock-based awards with vesting criteria subject to the achievement of performance-based conditions, in addition to service conditions, the Company recognizes stock-based compensation expense on an accelerated basis over the vesting period when achievement of the performance criteria becomes probable.

Stock-based compensation expense is recorded within research and development and general and administrative expenses in the accompanying statements of operations and comprehensive (loss) income based on the function to which the related services are provided. The Company recognizes stock-based compensation expense for the portion of awards that have vested. Forfeitures are accounted for as they occur.

Income Taxes

The Company adopted ASU 2019-12 Income Taxes (Topic 740): *Simplifying the Accounting for Income Taxes* on January 1, 2021, with no impact to the financial statements.

The Company utilizes the asset and liability approach to account for income taxes. Under this method, deferred income tax assets and liabilities are recorded based on the estimated future tax effects of differences between the financial statement and income tax basis of existing assets and liabilities. Deferred tax assets and liabilities are determined based upon the differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards, using enacted tax rates expected to be in effect in the year in which the differences are expected to reverse. Valuation allowances are provided, if based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions recognized in the financial statements by prescribing a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related interest and penalties.

Comprehensive (Loss) Income

Comprehensive (loss) income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. The Company did not have any other comprehensive income or loss for the periods presented and therefore comprehensive (loss) income was the same as the Company's net (loss) income.

Net (Loss) Income Per Share

Basic net (loss) income per share is computed by dividing the net (loss) income by the weighted-average number of common shares outstanding during the period, without consideration of potential dilutive securities. Vested restricted stock is treated as outstanding for accounting purposes. Unvested restricted stock is not considered to be outstanding for purposes of the calculation of basic net (loss) income per share. Diluted net (loss) income per share is computed by dividing the net (loss) income by the sum of the weighted-average number of common shares outstanding during the period plus the potential dilutive effects of potential dilutive shares outstanding during the period. Potential dilutive securities include stock options, unvested restricted stock and convertible preferred stock. The dilutive effect of stock options and unvested restricted stock is computed using the treasury stock method and the dilutive effect of convertible preferred stock is calculated using the "if-converted method." For all periods presented in a net loss position, diluted net loss per share is the same as basic net loss per share since the effect of including potential common shares is anti-dilutive.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

Basic and diluted net (loss) income per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. The Company considers all series of its convertible preferred stock to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the convertible preferred stock as the holders of its convertible preferred stock do not have a contractual obligation to share in the Company's losses. Net income is attributed to common stockholders and participating securities based on their participation rights.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326),* which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables and available for sale debt securities. Topic 326 is effective for annual periods beginning after December 15, 2022, and early adoption is permitted. The Company adopted Topic 326 on January 1, 2023, and the adoption did not have a material impact on its financial statements.

Accounting Pronouncements Not Yet Adopted

From time to time, new accounting pronouncements are issued by the FASB, under its ASC or other standard setting bodies, and adopted by the Company as of the specified date.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*. ASU 2023-07 will improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses on an interim and annual basis. The ASU is effective for fiscal years beginning after December 15, 2023, and interim periods after December 5, 2024, with early adoption permitted. The adoption of this standard is not expected to have a material impact on the Company's financial statements at adoption date.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which enhances the transparency and decision usefulness of income tax disclosures. The standard is intended to improve income tax disclosures primarily related to the rate reconciliation and income taxes paid information. This update also includes certain other amendments to improve the effectiveness of income tax disclosures. The ASU is effective for fiscal years beginning after December 15, 2025, on a prospective basis. Early adoption and retrospective reporting are permitted. We are currently evaluating the impact of ASU 2023-09 on our financial statements.

Emerging Growth Company Status and Smaller Reporting Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act, until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

The Company is also a smaller reporting company as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Company may continue to be a smaller reporting company even after it is no longer an emerging growth company. The Company may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as its voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of its second fiscal quarter, or its annual revenue is less than $100.0 million during the most recently completed fiscal year and its voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of its second fiscal quarter.

3. Balance Sheet Components

Cash and Cash Equivalents

Cash and cash equivalents consisted of the following (in thousands):

	As of December 31,	
	2022	2023
Cash	$ 1,000	$ 1,909
Cash equivalents:		
Money market funds	29,607	86,574
Cash and cash equivalents	$30,607	$88,483

Money market funds are highly liquid investments and are actively traded. The fair value of the Company's money market funds are based on quoted prices in active markets for identical securities. This approach results in the classification of these securities as Level 1 of the fair value hierarchy. There were no transfers between Level 1, 2, or 3 for any of the periods presented.

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	As of December 31,	
	2022	2023
Prepaid expenses	$ 566	$ 874
Prepaid bonus	513	378
Other current assets	204	167
Prepaid expenses and other current assets	$1,283	$1,419

SEPTERNA, INC.

Notes to Financial Statements—(continued)

Property and Equipment, Net

Property and equipment, net consist of the following (in thousands):

	As of December 31,	
	2022	2023
Lab equipment	$2,970	$ 4,967
Furniture and fixtures	34	465
Leasehold improvements	—	389
Office equipment	43	248
Computer equipment	154	218
Total property and equipment	3,201	6,287
Less: Accumulated depreciation and amortization	(798)	(1,622)
Property and equipment, net	$2,403	$ 4,665

Depreciation and amortization expense was $0.6 million and $0.8 million for the years ended December 31, 2022 and 2023, respectively.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	As of December 31,	
	2022	2023
Accrued compensation expense	$1,706	$2,954
Accrued operating expense	6	1,038
Accrued income taxes payable	—	200
Other current liabilities	50	85
Accrued expenses and other current liabilities	$1,762	$4,277

4. Gain on Sale of Non-Financial Asset

Vertex Asset Sale

In September 2023, the Company entered into an asset purchase agreement with Vertex under which Vertex acquired an IPR&D asset related to a GPCR program, including all intellectual property, materials, and compounds associated with the program (the "Vertex Purchase Agreement"). Additionally, as part of the agreement, Vertex assumed all claims, counterclaims and credits associated with the program, and the Company gave up all rights to the intellectual property. The transfer of the IPR&D asset to Vertex was completed in November 2023.

At the same time in September 2023, the Company entered into a research service agreement with Vertex under which the Company agreed to perform certain exploratory research activities for Vertex (the "Vertex Research Service Agreement") (see Note 5).

The Company concluded that the IPR&D asset sale should be accounted for under the guidance at ASC 610-20, as this type of transaction did not meet the definition of "ordinary activities" of the Company and Vertex should not be considered a "customer" in this transaction. However, since both the Vertex Purchase Agreement

and the Vertex Research Service Agreement were entered into at the same time with the same counterparty with a single commercial objective, the Company combined the contracts and applied the allocation principles under ASC 606. The Company identified the performance obligations in both contracts, determined the transaction price and allocated the transaction price to the performance obligations in the contracts based on the estimated standalone selling price for each performance obligation.

During the year ended December 31, 2023, the Company recorded a gain on sale of non-financial asset of $47.6 million for the sale of the IPR&D asset to Vertex on its statements of operations and comprehensive (loss) income. The Company received $25.0 million in cash at the closing of the agreement in September 2023 and recorded the remaining balance of $22.6 million in other receivable related to sale of non-financial asset on its balance sheet as of December 31, 2023. As of December 31, 2023, the sale of the IPR&D asset was complete and the Company had an unconditional right to the $22.6 million. The Company received the payment of $22.6 million of this balance in the first half of 2024.

The Vertex Purchase Agreement also provides for a potential milestone payment payable to the Company contingent upon achievement of a certain research milestone. The milestone payment amount is determined based on the timing of achievement of the research milestone. The variable consideration related to this milestone payment was determined to be improbable of receipt at this time. As a result, the milestone payment was excluded from the transaction price. After the potential milestone payment, the Company will not receive any other payments or future royalties related to this IPR&D asset.

5. Revenue

Vertex Research Service Agreement

As disclosed in Note 4, the Company entered into the Vertex Research Service Agreement in September 2023 under which the Company agreed to perform certain exploratory research activities for Vertex. Although the Company accounted for the IPR&D asset sale under the guidance at ASC 610-20, the research services portion of the transaction fell under the scope of the revenue from contracts with customers guidance, ASC 606.

The Vertex Research Service Agreement is for a two-year term, however, Vertex has the ability to terminate the agreement with a 30-day notice at any time. As a result, the Company concluded that the contract duration is 30 days, representing a month-to-month service contract. The Company recognizes this service revenue over the performance period of the research services as the services are provided. The Vertex Research Service Agreement also includes a provision related to additional research services, which the Company concluded met the definition of a customer option under ASC 606. The Company will recognize revenue related to the customer option if and when it is exercised.

During the year ended December 31, 2023, the Company recorded revenue of $0.2 million related to research activities performed in connection with the Vertex Research Service Agreement, which is also included in accounts receivable on the Company’s balance sheet at December 31, 2023.

6. Leases

Operating Lease

In April 2021, the Company entered into an operating lease for 12,560 square feet of office and research and development space at the Company’s headquarters in South San Francisco, California, which was scheduled to expire in February 2023. In September 2022, the Company amended the lease agreement to include an additional 9,348 square feet of office and research and development space, increasing the total leased premises to 21,908 square feet (the “Original Leased Space”), which was also scheduled to expire in February 2023.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

In December 2022, the Company entered into another lease amendment to extend the lease term of the Original Leased Space (the "Extension of Original Leased Space") and lease an additional 22,911 square feet of office and research and development space (the "Additional Leased Space"). Upon completion of the construction of the new office and research and development space in November 2023, the Additional Leased Space commenced, and the Company relocated its operations to the Additional Leased Space and vacated the Original Leased Space to allow the landlord to renovate it.

Renovation of the Original Leased Space was completed in July 2024. Upon completion of the renovation of the Original Leased Space, the lease of the Original Leased Space commenced, resulting in the total leased premises increasing to 44,819 square feet (the "Leased Space"). The lease term for the Leased Space is for eight years from the commencement date of the Original Leased Space. The amended lease also includes an option for the Company to extend the lease for an additional eight-year term (the "Extension Option"). As of December 31, 2023, it is not probable that the Company will exercise the Extension Option. As a result, the Company did not include the Extension Option in the calculation of the right-of-use asset and lease liability.

During the year ended December 31, 2023, the Company recorded an operating lease right-of-use asset and operating lease liability for the Additional Leased Space as the lease commenced in November 2023, when the Company took control of the property. As of December 31, 2023, the entire balance of the operating lease liability associated with the Additional Leased Space was classified as non-current as the Company received a rent abatement for four months in the first year of the lease and, therefore, the operating lease liability will increase over the 12 month-period starting from December 31, 2023. For the year ended December 31, 2022, the Company did not recognize a right-of-use asset or operating lease liability for the minimum rental payments associated with the Additional Leased Space.

The following table summarizes the expenses recognized and cash paid for the Leased Space (in thousands):

	Years Ended December 31,	
	2022	2023
Cash paid for operating lease liabilities	$ 595	$ 897
Operating lease costs	553	964
Short-term lease costs	154	1,018

During the year ended December 31, 2022, the Company recorded an increase of $0.6 million in the right-of-use asset and operating lease liability related to the Extension of Original Leased Space. In December 2023, the Company recorded a $12.6 million right-of-use asset and $12.6 million operating lease liability associated with the Additional Leased Space. These amounts are disclosed in the supplemental information of noncash activities on the statements of cash flows.

As of December 31, 2022, the remaining lease term of the Original Leased Space was approximately 1.0 year. The incremental borrowing rate used for the calculation of the present value of lease payments over the lease term for the Extension of Original Leased Space was approximately 18.8%.

As of December 31, 2023, the remaining lease term of the Additional Leased Space was approximately 8.5 years. The incremental borrowing rate used for the calculation of the present value of lease payments over the lease term at the lease commencement date was approximately 12.3%.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

As of December 31, 2023, future minimum rental payments for operating leases, including for the Original Leased Space, were as follows (in thousands):

Year Ending December 31,	Future Payments
2024	$ 1,913
2025	4,469
2026	4,612
2027	4,760
2028	4,912
Thereafter	18,490
Total lease payments	39,156
Less: undiscounted lease payments*	(18,690)
Less: imputed interest	(7,900)
Total present value of operating lease liability	$ 12,566

* Related to the Original Leased Space, which was under renovation at December 31, 2023 and commenced in July 2024.

As of December 31, 2022 and 2023, the Company did not have any finance leases.

7. Commitments and Contingencies

Legal Proceedings

In the ordinary course of business, the Company may be subject to legal proceedings, claims and litigation, as the Company operates in an industry susceptible to patent or other legal claims. The Company accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. As permitted under Delaware law and in accordance with its bylaws, the Company indemnifies its officers and directors for certain events or occurrences while the officer or director is or was serving in such capacity. The Company is also party to indemnification agreements with its officers and directors.

The Company also agreed to indemnify the investors against certain losses, claims or liabilities due to certain statements, omissions or violations by the Company if Company securities held by the investors are included in a registration statement. The certain statements, omissions or violations that are covered by these include, but are not limited to, (i) any untrue statement or alleged untrue statement of a material fact contained in the applicable registration statement, (ii) any omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, (iii) any violation or alleged violation by the Company of the Securities Act of 1933, as amended, the Exchange Act, and certain other securities laws. The Company will reimburse the investors for any legal or other expenses reasonably incurred by them in connection with investigating or defending such losses, claims, damages or liabilities.

The maximum potential amount of future payments that the Company could be required to make under these provisions is not determinable. The Company is not currently aware of any indemnification claims. Accordingly, the Company did not record any liabilities associated with these indemnification rights and agreements as of December 31, 2022 and 2023.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

8. Convertible Preferred Stock

As of December 31, 2022, the Company's convertible preferred stock consisted of the following (in thousands, except for share and per share amounts):

Series	Authorized Shares	Issued and Outstanding	Carrying Value	Liquidation Preference	Conversion Price Per Share
Series A	100,000,000	75,000,000	$ 74,694	$ 75,000	$ 1.00000

As of December 31, 2023, convertible preferred stock consisted of the following (in thousands, except for share and per share amounts):

Series	Authorized Shares	Issued and Outstanding	Carrying Value	Liquidation Preference	Conversion Price Per Share
Series A	75,000,000	75,000,000	$ 74,694	$ 75,000	$ 1.00000
Series B	121,657,452	60,828,720	74,521	75,000	$ 1.23297

In November 2021, the Company executed a Series A Convertible Preferred Stock financing arrangement that would provide financing of up to $100.0 million over an initial tranche and subsequent callable tranches through the issuance of up to 100.0 million shares of Series A Convertible Preferred Stock at an issuance price of $1.00 per share. In the initial tranche, the Company issued 45.0 million shares of Series A Convertible Preferred Stock for net proceeds of $44.7 million, of which $30.0 million was received in cash, net of issuance costs, and $14.7 million was for the conversion of the then outstanding convertible promissory notes plus accrued interest. The Series A Convertible Preferred Stock financing arrangement represented an equity financing, per the terms of the outstanding convertible promissory notes, and as such the unpaid principal and accrued interest outstanding of $14.7 million was converted into approximately 14.7 million shares of Series A Convertible Preferred Stock. Additionally, in November 2022, the Company executed the second tranche and issued 30.0 million shares of Series A Convertible Preferred Stock and received net cash proceeds of $30.0 million.

The Series A Convertible Preferred Stock Purchase Agreement provided that, upon the fulfillment of certain conditions, each investor would purchase its pro rata portion of the shares to be issued in additional Series A Convertible Preferred Stock closings. Further, the Company agreed to sell, and issue said shares of Series A Convertible Preferred Stock on the same terms as the first tranche in the Purchase Agreement. The Company did not separately account for tranche purchase rights described above as they were not freestanding from the associated shares of convertible preferred stock.

In June 2023, the Company amended and restated its certificate of incorporation to, among other things, increase the authorized number of shares of the Company's convertible preferred stock to 196.7 million shares, of which 121.7 million shares are designated as Series B Convertible Preferred Stock, and to establish the rights, preferences, privileges and restrictions of the Series B Convertible Preferred Stock.

In June 2023, the Company entered into a Series B Convertible Preferred Stock financing arrangement in which 121,657,452 shares of Series B Convertible Preferred Stock were authorized to be issued at an issuance price of $1.23297 per share over two tranches, for total proceeds of up to $150.0 million. In June 2023 and July 2023, the Company issued an aggregate of approximately 60.8 million shares of Series B Convertible Preferred Stock at an issuance price of $1.23297 per share for net proceeds of $74.5 million related to the first tranche, with a potential second tranche of additional funding for up to $75.0 million based on approval of the Board of Directors and consent of the majority of the holders of the then-outstanding Series B Convertible Preferred Stock. The Series B Convertible Preferred Stock Purchase Agreement provides that, upon the

SEPTERNA, INC.

Notes to Financial Statements—(continued)

fulfillment of certain conditions, each investor will purchase its pro rata portion of the shares to be issued in additional Series B Convertible Preferred Stock closings. Further, the Company agreed to sell, and issue said shares of Series B Convertible Preferred Stock on the same terms as the first tranche in the Purchase Agreement. The Company did not separately account for tranche purchase rights described above as they were not freestanding from the associated shares of convertible preferred stock.

Upon issuance of the Series B Convertible Preferred Stock, the Company also amended the Series A Convertible Preferred Stock agreement to cancel the remaining 25.0 million unissued shares of Series A Convertible Preferred Stock originally authorized under the agreement.

In May 2024, the Company executed the second tranche of the Series B Convertible Preferred Stock financing arrangement and issued the remaining approximately 60.8 million shares of Series B Convertible Preferred Stock for net proceeds of $74.9 million.

The rights, privileges, and preferences of the Series A and Series B Convertible Preferred Stock (together, the "Convertible Preferred Stock") are as follows:

Redemption

The Convertible Preferred Stock does not have redemption rights, except for the contingent redemption upon the occurrence of a Deemed Liquidation Event.

Conversion

Each share of the Convertible Preferred Stock is initially convertible, at the option of the holder at any time after all authorized shares of the Convertible Preferred Stock have been issued or if otherwise approved by the holders representing at least a majority of the then outstanding shares of the Convertible Preferred Stock, including at least one holder that, together with its affiliates, holds only shares of Series B Convertible Preferred Stock and is a major investor, as defined in the Company's amended and restated investors' rights agreement (the "Required Vote"), into shares of common stock as determined by dividing the original issue price by the conversion price in effect at the time of conversion. The Series A Convertible Preferred Stock conversion price is initially $1.00, and the Series B Convertible Preferred Stock conversion price is initially $1.23297. The conversion prices are subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Convertible Preferred Stock. The conversion prices are subject to adjustment in the event the Company issues additional shares of common stock without consideration or for a consideration per share less than the conversion price in effect prior to such issuance, unless the Required Vote determines that no such adjustment shall be made to the conversion price.

Special mandatory conversion will occur if a convertible preferred stockholder fails to purchase their agreed upon share, as originally allocated to such holder in the purchase agreement, in additional closings of the Convertible Preferred Stock as defined in the purchase agreement, and such failure is not cured as specified in the purchase agreement following receipt of the subsequent closing notification. Holders of Series B Convertible Preferred Stock have the option to waive the special mandatory conversion as specified in the purchase agreement. Upon such event, each share of the Convertible Preferred Stock held by such holder will be automatically converted into that number of shares of common stock equal to 10% of the original issue price divided by the conversion price in effect.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

Mandatory conversion of all outstanding shares of the Convertible Preferred Stock at the then effective conversion rate will also occur automatically upon (i) consent of holders representing the Required Vote or (ii) the closing of the sale of shares of common stock to the public at a price of at least $1.849455 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the common stock), in a firm commitment underwritten public offering resulting in at least $50.0 million in gross proceeds to the Company, after deducting underwriting discounts and commissions, and in connection with such offering the common stock is listed for trading on the Nasdaq, the New York Stock Exchange or another exchange approved by the board of directors, including the approval of at least a majority of the Convertible Preferred Stock directors.

Dividends

The Company shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Company, other than dividends on shares of common stock payable in shares of common stock, unless the holders of the Convertible Preferred Stock first receive, or simultaneously receive, a dividend on outstanding shares of the Convertible Preferred Stock in an amount at least equal to the dividend payable based on the number of shares of common stock at the then conversion rate, such that the calculation should result in the highest preferred stock dividend. The board of directors has not declared any dividends to-date.

Voting and Board Representation

Each holder of outstanding shares of the Convertible Preferred Stock is entitled to one vote for each share of common stock into which such shares of preferred stock are convertible and shall vote together with the holders of common stock as a single class and on an as-converted to common stock basis, except as provided by law or by the other provisions of the Company's certificate of incorporation.

The holders of shares of Series A Convertible Preferred Stock, exclusively and as a separate class, are entitled to elect three directors of the Company. The holders of shares of Series B Convertible Preferred Stock, exclusively and as a separate class, are entitled to elect one director of the Company. The holders of record of the shares of common stock and any other class or series of voting stock (including the Convertible Preferred Stock), as a single class, are entitled to elect the remaining directors. The size of the board shall be set and remain at seven directors.

Protective Provisions

At any time when shares of the Convertible Preferred Stock are outstanding, the Company shall first obtain the approval of the Required Vote, voting separately as a class, with respect to the following actions: (i) consummation of a liquidation, dissolution or winding up of the Company, or effect any merger, acquisition or consolidation or any other deemed liquidation event, (ii) amend, alter or repeal any provision of the Company's certificate of incorporation or bylaws, (iii) create, authorize, issue or obligate the Company to issue shares of any equity security or increase the authorized number of shares of the Convertible Preferred Stock or of any additional class or series of stock unless it ranks junior to the Convertible Preferred Stock, (iv) reclassify, alter or amend any existing security of the Company that is pari passu with the Convertible Preferred Stock, or is junior with the Convertible Preferred Stock , in respect of the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends or rights of redemption, if such reclassification alteration or amendment would render such other security senior to the Convertible Preferred Stock, or in the case of a previously junior security would render such security senior to or pari passu with the Convertible Preferred Stock, (v) pay or declare any dividend, other than dividends on the Convertible Preferred Stock, or make any distribution on any shares of capital stock prior to the Convertible Preferred Stock, other than common stock or

options to acquire common stock repurchased from former employees or consultants in connection with the cessation of their employment/services, pursuant to the provisions of existing plans or agreements, (vi) create, adopt, amend, terminate or repeal any equity or equity-linked compensation plan, (vii) increase or decrease the authorized number of directors constituting the Board of Directors, change the number of votes entitled to be cast by any director or directors on any matter, or adopt any provision inconsistent with Article Sixth; (viii) create or hold (or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue) any shares of capital stock in any subsidiary that is not a wholly-owned subsidiary of the Corporation, or sell, lease, transfer, exclusively license or otherwise dispose of any direct or indirect subsidiary capital stock or all or substantially all of any direct or indirect subsidiary assets; or (ix) sell, assign, license, pledge or encumber material technology or intellectual property, or enter into or grant any royalty streams related thereto, other than licenses granted in the ordinary course of business.

Liquidation Preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up, or in the event of a deemed liquidation event of the Company, the holders of shares of the Convertible Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders, or out of the consideration payable to stockholders, as applicable, before any payment shall be made to the holders of common stock, an amount per share equal to the greater of (i) the original issue price, plus any dividends declared but unpaid, or (ii) such amount per share as would have been payable had all shares of the Convertible Preferred Stock been converted into common stock immediately prior to such event. If, upon the occurrence of such event, the assets of the Company available for distribution to its stockholders are insufficient to pay the holders of the Convertible Preferred Stock the full amount to which they are entitled, the holders of the Convertible Preferred Stock shall share ratably in any distribution of the assets available for distribution.

Classification

The Company has classified the Convertible Preferred Stock outside of permanent equity on the balance sheet as these shares can be redeemed upon the occurrence of certain change in control events that are outside of the Company's control, including liquidation, sale or transfer of the Company. The Company has not adjusted the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of convertible preferred stock, and at the balance sheet dates these circumstances were not probable. Subsequent adjustments to the carrying values of the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur. As of December 31, 2022 and 2023, it was not probable that such a redemption would occur.

9. Common Stock

As of December 31, 2022, the Company was authorized to issue 150.0 million shares of $0.001 par value common stock. In June 2023, the Company amended and restated its certificate of incorporation to, among other things, increase the authorized number of shares of common stock of the Company to approximately 260.6 million shares. As of December 31, 2023, the Company was authorized to issue approximately 260.6 million shares of $0.001 par value common stock.

The holders of common stock are entitled to dividends when and if declared by the board of directors, subject to the preferences applicable to outstanding shares of the Convertible Preferred Stock. The board of directors has not declared any dividends and the Company has not paid any dividends. The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

The Company reserved the following shares of common stock, on an as-converted basis, for future issuance:

	As of December 31,	
	2022	2023
Series A Convertible Preferred Stock	11,613,997	8,710,490
Series B Convertible Preferred Stock	—	14,129,284
Restricted stock outstanding under 2021 Plan	1,188,206	774,225
Restricted stock outstanding outside of 2021 Plan	339,435	227,819
Options issued and outstanding under 2021 Plan	44,711	1,123,296
Shares reserved for future grants under 2021 Plan	815,105	1,634,488
Total	14,001,454	26,599,602

10. Stock-Based Compensation

2021 Stock Option and Grant Plan

In 2021, the Company adopted the Septerna, Inc. 2021 Stock Option and Grant Plan (the "2021 Plan"), which authorizes the Company to grant incentive stock options, non-qualified stock options, restricted stock awards, unrestricted stock awards and restricted stock units, to officers, employees, directors, consultants, or other key persons of the Company. The terms of the stock option and restricted stock agreements, including vesting requirements, are determined by the Board of Directors, subject to the provisions of the 2021 Plan. The exercise price of stock options shall not be less than the estimated fair value of the underlying common stock on the date of grant. Stock option awards expire 10 years from the grant date, or as otherwise determined by the Board of Directors, or in the case of incentive stock options granted to 10% stockholders, the term is no more than 5 years from the grant date. Additionally, the Company granted and issued restricted stock awards and allowed the recipients to purchase the unvested restricted stock awards at par value per share. The shares issued for unvested restricted stock awards under the 2021 Plan are subject to repurchase by the Company at the original issuance price in the event of the holder's termination of its relationship with the Company. Consideration received for shares associated with the unvested restricted stock awards is initially recorded as a liability and subsequently reclassified into stockholders' deficit as the related awards vest over the requisite service period.

The 2021 Plan initially authorized a total of approximately 2.4 million shares reserved for future issuance. In June 2023, the Company amended and restated its certificate of incorporation to, among other things, increase the shares reserved for issuance under the 2021 Plan to approximately 4.2 million shares. Approximately 0.8 million and 1.6 million shares remained available for future issuance under the 2021 Plan as of December 31, 2022 and 2023, respectively.

Restricted Stock Awards

The following summarizes restricted stock award activity under the 2021 Plan:

	Number of Shares Outstanding	Weighted-Average Grant Date Fair Value Per Share
Balance at December 31, 2022	1,188,206	$ 2.41
Restricted stock awards vested	(400,286)	2.50
Restricted stock awards repurchased	(13,695)	2.15
Balance at December 31, 2023	774,225	2.32

SEPTERNA, INC.

Notes to Financial Statements—(continued)

In addition to grants under the 2021 Plan, the Company has also granted restricted stock awards outside of plan, under the terms of restricted stock purchase agreements and subscription agreements, and unvested shares are subject to repurchase by the Company upon the holder's termination of its relationship with the Company at the original purchase price. Consideration received for shares associated with the unvested restricted stock awards is initially recorded as a liability and subsequently reclassified into stockholders' deficit as the related awards vest. The following summarizes restricted stock award activity outside of the 2021 Plan:

	Number of Shares Outstanding	Weighted-Average Grant Date Fair Value Per Share
Balance at December 31, 2022	339,435	$ 3.79
Restricted stock awards vested	(111,616)	3.79
Balance at December 31, 2023	227,819	3.79

The restricted stock awards generally include a service condition for vesting and vest over four years with a one-year cliff vesting and pro-rata monthly vesting thereafter, but some awards vest over different time periods. In addition, some restricted stock awards include vesting criteria subject to the achievement of performance-based conditions in addition to service conditions, for which the Company periodically assesses the probability that the performance criteria will be met and only recognizes stock-based compensation expense related to these awards when achievement of the performance criteria becomes probable. The total fair value of shares vested during the year ended December 31, 2023 was $1.4 million.

As of December 31, 2022 and 2023, $0.1 million and $0.1 million in other liabilities on the Company's balance sheets was related to the unvested shares subject to repurchase of approximately 1.5 million and 1.0 million shares, respectively.

Stock Options

The following summarizes stock option activity under the 2021 Plan:

	Options Outstanding			
	Total Options Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2022	44,711	$ 1.55	9.95	$ —
Granted	1,078,585	2.66		
Outstanding as of December 31, 2023	1,123,296	2.62	9.78	2,287
Exercisable as of December 31, 2023	82,224	2.45	9.63	181
Vested and expected to vest as of December 31, 2023	1,123,296	2.62	9.78	2,287

Stock options include a service condition for vesting and most stock options vest over four years with a one-year cliff vesting and pro-rata monthly vesting thereafter. The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock, as determined by the Board of Directors, as of December 31, 2023.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

The aggregate fair value of options that vested for the year ended December 31, 2023 was $0.2 million. The options granted in the year ended December 31, 2023 had a weighted-average per share grant-date fair value of $3.01 and a total grant date fair value of $3.2 million.

Stock Option Valuation

The weighted-average assumptions used to value employee and non-employee stock option awards granted under the 2021 Plan during the years ended December 31, 2022 and 2023, using the Black Scholes option pricing model, were as follows:

	Years Ended December 31,	
	2022	2023
Fair value of common stock	$ 1.12	$ 3.01
Risk-free interest rate	3.64%	4.56%
Expected volatility	89.2%	86.2%
Expected term (years)	5.83	5.90
Expected dividend yield	— %	— %

In determining the fair value of the options granted, the Company uses the Black Scholes option pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Fair Value of Common Stock — Given the absence of a public trading market for the Company's common stock, the Board of Directors, with input from management, determine the fair value of common stock by considering a number of objective and subjective factors including (i) valuations performed by independent third parties, (ii) important developments in the Company's operations, (iii) the rights, preferences, and privileges of the Company's preferred stock relative to those of the Company's common stock, (iv) actual operating results and financial performance, including the Company's levels of available capital resources, (v) the conditions in the capital markets, biotechnology industry and the U.S. economy in general, (vi) the stock price performance and volatility of comparable public companies and (vii) the lack of marketability of the Company's common stock, among other factors.

Expected Term — The expected term represents the period that the Company's stock options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term). The Company has very limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants. The Company will continue to apply this process until a sufficient amount of historical information regarding employee exercise patterns and post-vesting employment termination behavior becomes available.

Expected Volatility — Since the Company is not a public company and has no trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period, where available, equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, life cycle stage and area of specialty.

Risk-free Interest Rate — The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the options.

Expected Dividend — The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Stock-based Compensation Expense

Stock-based compensation expense for restricted stock awards and stock options recognized in the Company's statements of operations and comprehensive (loss) income is presented as follows (in thousands):

	Years Ended December 31,	
	2022	2023
Research and development expense	$ 848	$ 887
General and administrative expense	672	733
Total stock-based compensation expense	$ 1,520	$ 1,620

As of December 31, 2023, total unrecognized stock-based compensation expense related to unvested restricted stock awards and unvested stock options was $5.2 million, which is expected to be recognized over a weighted-average period of 2.9 years. As of December 31, 2023, total unrecognized stock-based compensation expense related to unvested restricted stock awards subject to performance conditions, which were improbable of achievement, was $0.3 million.

11. Income Taxes

The components of the provision for income taxes were as follows for the years ended December 31, 2022 and 2023 (in thousands):

	Years Ended December 31,	
	2022	2023
Current:		
Federal	$ —	$ 200
State	—	—
Total current	—	200
Deferred:		
Federal	—	491
State	—	—
Total deferred	—	491
Provision for income taxes	$ —	$ 691

For the year ended December 31, 2022, the Company had no income tax expense due to operating losses incurred. For the year ended December 31, 2023, the Company recorded income tax expense of $0.7 million.

A reconciliation of the Company's effective tax rate to the statutory U.S. federal rate is as follows:

	Years Ended December 31,	
	2022	2023
U.S. federal taxes at statutory rate	21.0%	21.0%
State tax, net of federal benefit	1.6	(34.2)
Stock compensation	(1.2)	6.9
Tax credits	0.7	(19.1)
Change in valuation allowance	(18.1)	39.5
State NOL reserve	(4.0)	—
Other	—	0.1
Total effective income tax rate	— %	14.2%

SEPTERNA, INC.

Notes to Financial Statements—(continued)

Deferred income taxes reflect the net tax effects of loss and credit carryforwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The types of temporary differences that give rise to significant portions of the Company's deferred income tax assets and liabilities are set out below (in thousands):

	Years Ended December 31,	
	2022	2023
Net operating loss carryforwards	$ 4,819	$ 3,940
Research and development credits	1,235	2,338
Lease liability	149	3,516
Stock-based compensation	—	9
Accrued liabilities	359	841
Sec 174 capitalized research and development costs	3,884	11,313
Total deferred tax assets before valuation allowance	10,446	21,957
Valuation allowance	(10,205)	(12,127)
Total deferred tax assets	241	9,830
Property and equipment	(94)	(521)
Right-of-use assets	(147)	(3,504)
Sale of non-financial asset	—	(6,296)
Total deferred tax liabilities	(241)	(10,321)
Net deferred income tax liabilities	$ —	$ (491)

The Company has established a valuation allowance for the amount of deferred tax assets that are not more likely than not be realized. Management considered all available evidence, both positive and negative, including but not limited to the Company's historical operating results, income or loss in recent periods, cumulative losses in recent years, forecasted earnings, future taxable income, and significant risk and uncertainty related to forecasts, and concluded the deferred tax assets are not more likely than not to be realized. The net change in the total valuation allowance for the years ended December 31, 2022 and 2023 was an increase of $10.2 million and $1.9 million, respectively.

As of December 31, 2023, the Company had $14.6 million of federal net operating loss carryforwards and $28.9 million of state net operating loss carryforwards, available to reduce future taxable income. Of the federal net operating loss carryforwards, $14.6 million will carryforward indefinitely. The state net operating loss carryforwards will begin to expire in 2041, if not utilized.

As of December 31, 2023, the Company had federal research and development tax credits carryforward of $2.0 million and state research and development tax credits carryforward of $1.8 million, available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2041 if not utilized. The state research and development tax credits have no expiration date.

Internal Revenue Code section 382 ("IRC Section 382") places a limitation (the "Section 382 Limitation") on the amount of taxable income that can be offset by net operating loss ("NOL") carryforwards after a change in control (generally greater than 50% change in ownership) of a loss corporation. California has similar rules. When an ownership change occurs, IRC Section 382 limits the use of NOLs and credits in subsequent periods based on the annual 382 limitations. The annual 382 limitations may limit the full use of available tax attributes in one year but the identified ownership changes may not result in expiration of tax attributes for use prior to

expiration of their respective carryforward periods. The Company performed a Section 382 analysis through the year ended December 31, 2023 and determined there were ownership changes in 2021 and 2023 that resulted in 382 limitations limiting the full use of carryover attributes in 2023. The ownership changes did not result in a reduction of its net operating loss or in its research and development credit carryforwards expiring unused. Accordingly, none of the tax attributes have been reduced but limited the full use in 2023. If additional ownership change occurs, the utilization of net operating loss and credit carryforwards could be significantly reduced.

A reconciliation of the beginning and ending unrecognized tax benefit amount is as follows (in thousands):

	Years Ended December 31,	
	2022	2023
Balance at the beginning of the year	$ —	$ 1,828
Additions based on tax positions related to current year	424	728
Adjustment based on tax positions related to prior years	1,404	(27)
Balance at end of the year	$ 1,828	$ 2,529

The reversal of the uncertain tax benefits would not impact the Company's effective tax rate as the Company continues to maintain a full valuation allowance against its deferred tax assets.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. During the years ended December 31, 2022 and 2023, the Company did not recognize accrued interest and penalties related to unrecognized tax benefits.

The Company files income taxes in the U.S. federal jurisdiction, the state of California and various other U.S. states. The Company is not currently under examination by income tax authorities in federal, state or other jurisdictions. All income tax returns will remain open for examination by the federal, state and foreign authorities for three or four years, from the date of utilization of any NOLs or credits.

12. Related Parties

Third Rock Ventures

During the year ended December 31, 2022 and 2021, the Company issued a total of approximately 41.3 million shares of its Series A Convertible Preferred Stock to Third Rock Ventures V, L.P., a holder of more than 5% of the Company's outstanding capital stock, during the initial and second tranche closings, for cash proceeds of approximately $26.6 million and upon conversion of outstanding convertible promissory notes of $14.7 million (see Note 8).

During the year ended December 31, 2023, the Company issued a total of approximately 12.4 million shares of its Series B Convertible Preferred Stock to Third Rock Ventures VI, L.P., a holder of more than 5% of the Company's outstanding capital stock, during the first tranche closing, for cash proceeds of $15.2 million.

In August 2021, the Company entered into a service agreement with Third Rock Ventures, LLC ("TRV"), a holder of more than 5% of the Company's outstanding capital stock, (the "TRV service agreement") under which TRV provides consulting services to the Company. For the years ended December 31, 2022 and 2023, the Company recorded expense of $1.3 million and $0.3 million, respectively, for such services as general

and administrative expenses in the Company's statements of operations and comprehensive (loss) income. As of December 31, 2022 and 2023, outstanding accounts payable to TRV were $0.1 million and $0.1 million, respectively.

The Company's interim Chief Medical Officer, and also a member of the Company's board of directors, was designated to the Company's board of directors by TRV and is affiliated with TRV. He did not receive any cash compensation from the Company for his service as its interim Chief Medical Officer, as his services were provided to the Company through the TRV service agreement. Of the total fees the Company incurred under the TRV service agreement for the years ended December 31, 2022 and 2023, $0.3 million and $0.2 million, respectively, were attributed to services provided as the Company's interim Chief Medical Officer. Additionally, as compensation for his services as the Company's interim Chief Medical Officer, the Company granted him options to purchase 11,613 shares of the Company's common stock during the year ended December 31, 2022, and 26,712 shares during the year ended December 31, 2023, at exercise prices of $1.55 and $2.76 per share, respectively.

RA Capital

During the year ended December 31, 2023, the Company issued a total of approximately 12.2 million shares of its Series B Convertible Preferred Stock to entities affiliated with RA Capital Management, L.P., which collectively hold more than 5% of the Company's outstanding capital stock, during the first tranche closing, for cash proceeds of $15.0 million.

Samsara BioCapital

During the year ended December 31, 2023, the Company issued a total of approximately 4.3 million shares of its Series B Convertible Preferred Stock to Samsara BioCapital, L.P., a holder of more than 5% of the Company's outstanding capital stock, during the first tranche closing, for cash proceeds of $5.2 million.

SEPTERNA, INC.

Notes to Financial Statements—(continued)

13. Net (Loss) Income Per Share

The following table sets forth the computation of the basic and diluted net (loss) income per share (in thousands, except for share and per share data):

	Years Ended December 31,	
	2022	2023
Numerator, basic:		
Net (loss) income	$ (27,676)	$ 4,180
Allocation of earnings to participating preferred stockholders	—	(3,613)
Net (loss) income applicable to common stockholders	$ (27,676)	$ 567
Denominator, basic:		
Weighted average shares outstanding used to compute net (loss) income per common share, basic	1,436,875	1,928,586
Numerator, diluted:		
Net (loss) income	$ (27,676)	$ 4,180
Allocation of earnings to participating preferred stockholders	—	(3,551)
Net (loss) income applicable to common stockholders	$ (27,676)	$ 629
Denominator, diluted:		
Weighted-average shares outstanding used to compute net (loss) income per common share, basic	1,436,875	1,928,586
Common stock options	—	14,737
Unvested restricted stock	—	233,801
Weighted-average shares outstanding used to compute net (loss) income per common share, diluted	1,436,875	2,177,124
Net (loss) income per share, basic	$ (19.26)	$ 0.29
Net (loss) income per share, diluted	$ (19.26)	$ 0.29

Potentially dilutive securities not included in the calculation of diluted net (loss) income per share because to do so would be anti-dilutive were as follows (in common stock equivalent shares):

	Years Ended December 31,	
	2022	2023
Outstanding stock options	44,711	198,084
Unvested restricted stock subject to repurchase	1,451,961	340,649
Total antidilutive securities	1,496,672	538,733

SEPTERNA, INC.

Notes to Financial Statements—(continued)

14. Employee Retirement Benefit Plan

The Company maintains a 401(k) retirement savings plan (the "401(k) Plan") for its employees. The 401(k) Plan allows eligible employees to make contributions up to the maximum allowable by the Internal Revenue Service ("IRS"). For the year ended December 31, 2023, the Company made matching contributions of and recorded contribution expenses of $0.1 million. For the year ended December 31, 2022, the Company did not make any matching contributions.

15. Subsequent Events

The Company evaluated all subsequent events for recognition and measurement purposes through August 2, 2024, (except for the impact of the reverse stock split as discussed in Note 1, as to which the date is October 21, 2024), the date the financial statements were available for issuance. The Company has concluded that no subsequent events have occurred that require disclosure, except as described below.

Subsequent Financings

In May 2024, the Company executed the second tranche of the Series B Convertible Preferred Stock financing arrangement and issued the remaining approximately 60.8 million shares of Series B Convertible Preferred Stock, for net proceeds of $74.9 million.

Executive Officer and Director Equity Awards Modification

In May 2024, the Company's board of directors modified the terms of stock option awards for 0.8 million shares of the Company's common stock granted during the year ended December 31, 2023, stock option awards for 0.5 million shares of the Company's common stock granted in 2024 and restricted stock awards for 0.9 million shares granted during the years ended December 31, 2022 and 2021 to certain executive officers and members of the Company's board of directors. Under the modified terms, accelerated vesting provisions were added associated with certain change of control events.

SEPTERNA, INC.

Condensed Balance Sheets
(In thousands, except for share and per share data)
(Unaudited)

	As of December 31, 2023	As of June 30, 2024
Assets		
Current assets:		
Cash and cash equivalents	$ 88,483	$ 131,172
Marketable securities	—	17,665
Accounts receivable	151	200
Other receivable related to sale of non-financial asset	22,625	—
Prepaid expenses and other current assets	1,419	2,186
Total current assets	112,678	151,223
Marketable securities, non-current	—	6,852
Property and equipment, net	4,665	5,122
Operating lease right-of-use asset	12,522	12,032
Restricted cash	905	905
Other non-current assets	97	499
Total assets	$ 130,867	$ 176,633
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 2,637	$ 2,315
Accrued expenses and other current liabilities	4,277	5,318
Operating lease liability, current	—	131
Total current liabilities	6,914	7,764
Operating lease liability, non-current	12,566	12,142
Other non-current liabilities	546	333
Total liabilities	20,026	20,239
Commitments and contingencies (Note 5)		
Convertible preferred stock:		
Series A Convertible Preferred Stock, $0.001 par value per share; 75,000,000 shares authorized at December 31, 2023 and June 30, 2024; 75,000,000 shares issued and outstanding as of December 31, 2023 and June 30, 2024; liquidation preference of $75,000 at December 31, 2023 and June 30, 2024	74,694	74,694
Series B Convertible Preferred Stock, $0.001 par value per share; 121,657,452 shares authorized at December 31, 2023 and June 30, 2024; 60,828,720 and 121,657,452 shares issued and outstanding as of December 31, 2023 and June 30, 2024, respectively; liquidation preference of $75,000 and $150,000 at December 31, 2023 and June 30, 2024, respectively	74,521	149,463
Stockholders' deficit:		
Common stock, $0.001 par value per share, 260,590,689 shares authorized at December 31, 2023 and June 30, 2024; 3,168,134 and 3,163,020 shares issued and outstanding at December 31, 2023 and June 30, 2024, respectively; 1,002,044 and 784,550 shares subject to repurchase as of December 31, 2023 and June 30, 2024, respectively	3	3
Additional paid-in capital	8,199	9,425
Accumulated other comprehensive loss	—	(8)
Accumulated deficit	(46,576)	(77,183)
Total stockholders' deficit	(38,374)	(67,763)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 130,867	$ 176,633

The accompanying notes are an integral part of these unaudited condensed financial statements.

SEPTERNA, INC.

Condensed Statements of Operations and Comprehensive Loss
(In thousands, except for share and per share data)
(Unaudited)

	Six Months Ended June 30,	
	2023	2024
Revenue	$ —	$ 687
Operating expenses:		
Research and development	16,372	28,188
General and administrative	3,830	6,054
Total operating expenses	20,202	34,242
Loss from operations	(20,202)	(33,555)
Other income, net:		
Interest income	435	2,809
Other expense, net	(2)	(63)
Total other income, net	433	2,746
Loss before benefit for income taxes	(19,769)	(30,809)
Benefit for income taxes	—	202
Net loss attributable to common stockholders	$ (19,769)	$ (30,607)
Net loss per share attributable to common stockholders, basic and diluted	$ (11.06)	$ (13.40)
Weighted-average shares outstanding, basic and diluted	1,788,039	2,284,414
Comprehensive loss:		
Net loss	$ (19,769)	$ (30,607)
Net unrealized loss on available-for-sale marketable securities	—	(8)
Total other comprehensive loss	—	(8)
Comprehensive loss	$ (19,769)	$ (30,615)

The accompanying notes are an integral part of these unaudited condensed financial statements.

SEPTERNA, INC.

Condensed Statements of Convertible Preferred Stock and Stockholders' Deficit

(In thousands, except for share and per share data)

(Unaudited)

	Convertible Preferred Stock				Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
	Series A		Series B							
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2022	75,000,000	$74,694	—	$ —	3,181,829	$ 3	$ 6,552	$ —	$ (50,756)	$ (44,201)
Issuance of Series B Convertible Preferred Stock, net of issuance costs of $479	—	—	58,801,098	72,021	—	—	—	—	—	—
Vesting of restricted common stock	—	—	—	—	—	—	15	—	—	15
Repurchase of unvested restricted common stock	—	—	—	—	(2,807)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	698	—	—	698
Net loss	—	—	—	—	—	—	—	—	(19,769)	(19,769)
Balance at June 30, 2023	75,000,000	$74,694	58,801,098	$ 72,021	3,179,022	$ 3	$ 7,265	$ —	$ (70,525)	$ (63,257)
Balance at December 31, 2023	75,000,000	$74,694	60,828,720	$ 74,521	3,168,134	$ 3	$ 8,199	$ —	$ (46,576)	$ (38,374)
Issuance of Series B Convertible Preferred Stock, net of issuance costs of $58	—	—	60,828,732	74,942	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	—	—	6,403	—	11	—	—	11
Vesting of restricted common stock	—	—	—	—	—	—	10	—	—	10
Repurchase of unvested restricted common stock	—	—	—	—	(11,517)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	1,205	—	—	1,205
Net unrealized loss on available-for-sale marketable securities	—	—	—	—	—	—	—	(8)	—	(8)
Net loss	—	—	—	—	—	—	—	—	(30,607)	(30,607)
Balance at June 30, 2024	75,000,000	$74,694	121,657,452	$149,463	3,163,020	$ 3	$ 9,425	$ (8)	$ (77,183)	$ (67,763)

The accompanying notes are an integral part of these unaudited condensed financial statements.

SEPTERNA, INC.

Condensed Statements of Cash Flows
(Unaudited)
(In thousands)

	Six Months Ended June 30,	
	2023	2024
Cash flows from operating activities:		
Net loss	$ (19,769)	$ (30,607)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	372	649
Non-cash operating lease expense	335	490
Stock-based compensation	698	1,205
Amortization of premiums (discounts), net	—	(230)
Deferred income tax	—	(202)
Other	—	(2)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	33	(767)
Accounts receivable	—	(50)
Other non-current assets	(69)	12
Accounts payable	(1,043)	(340)
Accrued expenses and other current liabilities	(218)	436
Operating lease, net	(331)	(292)
Net cash used in operating activities	(19,992)	(29,698)
Cash flows from investing activities:		
Purchases of property and equipment	(1,244)	(913)
Proceeds from sale of non-financial asset	—	22,625
Purchases of available-for-sale marketable securities	—	(32,187)
Maturities of available-for-sale marketable securities	—	7,910
Net cash used in investing activities	(1,244)	(2,565)
Cash flows from financing activities:		
Proceeds from issuance of Series B Convertible Preferred stock, net of issuance costs	71,463	75,000
Repurchases of forfeited restricted common stock	—	(1)
Proceeds from exercise of stock options	—	11
Payments of deferred offering costs	—	(58)
Net cash provided by financing activities	71,463	74,952
Net increase in cash, cash equivalents and restricted cash	50,227	42,689
Cash, cash equivalents and restricted cash, beginning of period	31,469	89,388
Cash, cash equivalents and restricted cash, end of period	$ 81,696	$ 132,077
Reconciliation of cash, cash equivalents and restricted cash reported within the unaudited condensed balance sheets to the total amounts reported on the unaudited condensed statements of cash flows:		
Cash and cash equivalents	$ 80,791	$ 131,172
Restricted cash	905	905
Total cash, cash equivalents and restricted cash at end of period	$ 81,696	$ 132,077
Supplemental cash flow information:		
Cash paid for income taxes	$ —	$ 157
Supplemental disclosure for noncash investing and financing activities:		
Equity receivable included in prepaid expenses and other current assets related to issuance of Series B Convertible Preferred stock	$ 1,000	$ —
Issuance costs of Series B Convertible Preferred Stock included in accounts payable and accrued expenses and other current liabilities	$ 442	$ 58
Unpaid deferred offering costs included in accrued expenses and other current liabilities	$ —	$ 355
Property and equipment included in accounts payable and accrued expenses and other current liabilities	$ 140	$ 208

The accompanying notes are an integral part of these unaudited condensed financial statements.

SEPTERNA, INC.

Notes to Condensed Financial Statements
(Unaudited)

1. Organization and Basis of Presentation

Description of the Business

Septerna, Inc. ("Septerna" or the "Company") is a clinical-stage biotechnology company pioneering a new era of G protein-coupled receptor ("GPCR") oral small molecule drug discovery powered by its proprietary Native Complex Platform™. The Company's industrial-scale platform aims to unlock the full potential of GPCR therapies and has led to the discovery and development of its deep pipeline of product candidates focused on treating patients in three therapeutic areas: endocrinology, immunology and inflammation, and metabolic diseases.

The Company was incorporated in Delaware in December 2019, under the name GPCR NewCo, Inc. In June 2021, the Company changed its name to Septerna, Inc. The Company is headquartered in South San Francisco, California.

Liquidity and Capital Resources

The accompanying unaudited condensed financial statements have been prepared assuming the Company will continue as a going concern, which assumes that the Company will realize its assets and satisfies its liabilities in the normal course of business. The Company is subject to risks inherent in operating an early-stage biotechnology business. These risks include, but are not limited to, dependence on the development of marketable products, the ability to attract, retain, and motivate qualified personnel, rapid technological changes and the rapidly evolving nature of the biotechnology industry.

The Company has historically financed its operations primarily through the issuances of convertible promissory notes and convertible preferred stock. In June 2023, the Company entered into a total of $150.0 million of Series B Convertible Preferred Stock financing, which was divided into two tranches of equal amounts. The first tranche, which was the issuance of $75.0 million of Series B Convertible Preferred Stock, was completed in June and July 2023 for total net proceeds of $74.5 million. In May 2024, the Company completed the issuance of the remaining $75.0 million Series B Convertible Preferred Stock under the second tranche for net proceeds of $74.9 million (see Note 6).

Additionally, during the fourth quarter of 2023, the Company recorded a gain on sale of non-financial asset of $47.6 million for the sale of an in-progress research and development asset related to a GPCR program, resulting in a reduction in the accumulated deficit in the fourth quarter of 2023, and net income for the year ended December 31, 2023. The Company received the remaining balance owed of $22.6 million related to the sale during the six months ended June 30, 2024.

The Company has incurred significant losses and negative cash flows from operations since its inception and expects to incur losses as a result of its continued research and development activities. To date, none of the Company's product candidates have been approved by the U.S. Food and Drug Administration ("FDA") for commercial sale and, therefore, the Company has not generated any revenue from product sales. For the six months ended June 30, 2023 and 2024, the Company incurred net losses of $19.8 million and $30.6 million, respectively.

The Company had an accumulated deficit of $77.2 million as of June 30, 2024. The Company believes its cash, cash equivalents, marketable securities, and marketable securities, non-current of $155.7 million as of June 30, 2024 will be sufficient to fund the Company's operations for, at least, 12 months from the date of issuance of these unaudited condensed financial statements.

SEPTERNA, INC.

Notes to the Condensed Financial Statements (continued)
(Unaudited)

Basis of Presentation

The accompanying unaudited interim condensed financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") for interim financial information and pursuant to Article 10 of Regulation S-X of the Securities Act of 1933, as amended (Securities Act), and reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for the fair presentation of the Company's unaudited interim condensed financial statements as of December 31, 2023 and June 30, 2024, and for the six months ended June 30, 2023 and 2024. Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification and Accounting Standards Updates ("ASUs"), of the Financial Accounting Standards Board ("FASB"). The interim condensed financial statements are unaudited. The operating results presented in these unaudited interim condensed financial statements are not necessarily indicative of the results that may be expected for the full year or for any other future annual or interim period. Actual results could differ materially from estimates and assumptions. As appropriate, the Company assesses estimates each period and updates them to reflect current information, and generally reflect any changes in estimates in the period first identified.

These interim unaudited condensed financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2023 and the related notes thereto included elsewhere in this prospectus.

Significant Accounting Policies

During the six months ended June 30, 2024, there were no changes to the Company's significant accounting policies as described in the Company's audited annual financial statements for the year ended December 31, 2023 other than the policies outlined below.

Cash Equivalents and Marketable Securities

The Company holds marketable securities that consist of highly liquid, investment grade debt securities. The Company's cash and marketable securities are held or issued by financial institutions that management believes are of high credit quality. Marketable securities are classified and accounted for as available-for-sale. Available-for-sale marketable securities with original maturities of 90 days or less are classified as cash equivalents. Available-for-sale marketable securities with original maturities of greater than 90 days and remaining maturities of less than 12 months are classified as current. Available-for-sale marketable securities with remaining maturities of more than 12 months for which the Company has the intent and ability to hold the security for more than 12 months are classified as non-current. The Company's marketable securities are carried at estimated fair value, which is derived from independent pricing sources based on quoted prices in active markets for similar securities. Unrealized gains and losses are reported in stockholders' deficit as accumulated other comprehensive loss. The amortized cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the condensed statements of operations and comprehensive loss.

The Company has the ability, if necessary, to liquidate any of its cash equivalents and available-for-sale marketable securities to meet its liquidity needs in the next 12 months. After consideration of the Company's objectives to preserve capital, as well as its liquidity requirements, it may sell these available-for-sale marketable securities prior to their stated maturities.

The Company reviews its portfolio of available-for-sale marketable securities, using both quantitative and qualitative factors, to determine if declines in fair value below amortized cost have resulted from a credit-related

loss or other factors. If the decline in fair value is due to credit-related factors, the Company recognizes a loss in its condensed statement of operations, whereas if the decline in fair value is not due to credit-related factors, the Company recognizes the loss in other comprehensive loss.

The Company excludes the applicable accrued interest from both the fair value and amortized cost basis of available-for-sale marketable securities for purposes of identifying and measuring an impairment. Accrued interest receivable on available-for-sale marketable securities is recorded within prepaid expenses and other current assets on the interim condensed balance sheets. The Company's accounting policy is to not measure an allowance for credit loss for accrued interest receivable and to write-off any uncollectible accrued interest receivable as a reversal of interest income in a timely manner, which is considered to be in the period in which it is determined the accrued interest will not be collected.

Deferred Offering Costs

The Company's deferred offering costs consist of legal, accounting and other general and administrative costs directly attributable to the Company's planned initial public offering ("IPO"). After consummation of the planned IPO, these costs will be classified in stockholders' deficit as a reduction of additional paid-in capital recorded as a result of the IPO. In the event the planned IPO is terminated, all deferred offering costs will be reclassified to general and administrative expenses in the Company's condensed statements of operations and comprehensive loss. As of June 30, 2024, $0.4 million of deferred offering costs were included within other non-current assets in the Company's condensed balance sheet. As of December 31, 2023, there were no deferred offering costs.

Reverse Stock Split

On October 17, 2024, the Company's board of directors approved a 1-for-8.6103 reverse stock split of its issued and outstanding shares of common stock, which was effected on October 18, 2024. Upon the effectiveness of the reverse stock split, (i) all shares of outstanding common stock were adjusted; (ii) the conversion ratio of the convertible preferred stock was adjusted; (iii) the number of shares of common stock for which each outstanding option to purchase common stock is exercisable were adjusted; and (iv) the exercise price of each outstanding option to purchase common stock was adjusted. All of the outstanding common stock share numbers (including shares of common stock subject to the Company's options and as converted for the outstanding convertible preferred stock), share prices, exercise prices and per share amounts contained in the financial statements have been retroactively adjusted in the financial statements to reflect this reverse stock split for all periods presented. The par value per share and the authorized number of shares of common stock and preferred stock were not adjusted as a result of the reverse stock split. The number of authorized shares has not changed.

Accounting Pronouncements Not Yet Adopted

From time to time, new accounting pronouncements are issued by the FASB, under its ASC or other standard setting bodies, and adopted by the Company as of the specified date.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*. ASU 2023-07 will improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses on an interim and annual basis. The ASU is effective for fiscal years beginning after December 15, 2023, and interim periods after December 5, 2024, with early adoption permitted. The adoption of this standard is not expected to have a material impact on the Company's condensed financial statements at adoption date.

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which enhances the transparency and decision usefulness of income tax disclosures. The standard is intended to improve income tax disclosures primarily related to the rate reconciliation and income taxes paid information. This update also includes certain other amendments to improve the effectiveness of income tax disclosures. The ASU is effective for fiscal years beginning after December 15, 2025, on a prospective basis with early adoption and retrospective reporting permitted. The Company is currently evaluating the impact of ASU 2023-09 on its condensed financial statements.

2. Balance Sheet Components

Restricted Cash

Restricted cash is comprised of cash that is restricted as to withdrawal or use under the terms of certain contractual agreements. In connection with the Company's lease agreement, the Company is required to maintain a collateral account to secure a letter of credit issued to its landlord. The collateral account is classified as restricted cash on the Company's condensed balance sheets.

Accounts Receivable and Other Receivables

The Company assessed if an allowance for expected credit losses over the life of its receivables should be reserved for based on a combination of historical experience, aging analysis, current economic trends and information on specific accounts, with related amounts recorded as a reserve against revenue recognized. The reserve is re-evaluated on a regular basis and adjusted as needed. Once a receivable is deemed to be uncollectible, such balance is charged against the reserve. Based on its assessment, as of December 31, 2023 and June 30, 2024, the Company determined that an allowance for credit loss was not required.

As of December 31, 2023, the Company's accounts receivable and other receivable related to sale of non-financial asset balances were entirely attributed to Vertex Pharmaceuticals Incorporated ("Vertex"). As of June 30, 2024, the Company's accounts receivable was entirely attributed to Vertex.

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	As of December 31, 2023	As of June 30, 2024
Prepaid expenses	$ 874	$ 1,416
Prepaid bonus	378	264
Prepaid taxes	75	232
Interest receivable	—	96
Other current assets	92	178
Prepaid expenses and other current assets	$ 1,419	$ 2,186

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

Property and Equipment, Net

Property and equipment, net consist of the following (in thousands):

	As of December 31, 2023	As of June 30, 2024
Lab equipment	$ 4,967	$ 5,437
Furniture and fixtures	465	465
Leasehold improvements	389	413
Office equipment	248	248
Computer equipment	218	243
Construction in progress	—	551
Total property and equipment	6,287	7,357
Less: Accumulated depreciation and amortization	(1,622)	(2,235)
Property and equipment, net	$ 4,665	$ 5,122

Depreciation and amortization expense was $0.4 million and $0.6 million for the six months ended June 30, 2023 and 2024, respectively. Construction in progress as of June 30, 2024 related to leasehold improvements for the Company's Original Leased Space which were under renovation at June 30, 2024, and placed in service in July 2024 upon commencement of the Company's lease of the space.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	As of December 31, 2023	As of June 30, 2024
Accrued operating expense	$ 1,038	$ 2,979
Accrued compensation expense	2,954	2,075
Accrued income taxes payable	200	200
Other current liabilities	85	64
Accrued expenses and other current liabilities	$ 4,277	$ 5,318

3. Revenue

The Company recognizes service revenue associated with the Vertex Research Service Agreement over the performance period of the research services as the services are provided in accordance with Accounting Standards Codification ("ASC") Topic 606, Revenue from Contracts with Customers ("ASC Topic 606"). During the six months ended June 30, 2024, the Company recorded service revenue of approximately $0.7 million related to research activities performed in connection with the Vertex Research Service Agreement. During the six months ended June 30, 2023, no revenue was recorded.

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

4. Available-for-Sale Marketable Securities and Fair Value Measurements

The Company records marketable securities and cash equivalents at their estimated fair values, which are based on market prices from a variety of industry standard data providers and generally represent quoted prices for similar assets in active markets or have been derived from observable market data.

Fair value is determined based on a three-tier hierarchy under the authoritative guidance for fair value measurements and disclosures that prioritizes the inputs used in measuring fair value as follows:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2: Quoted prices in markets that are not active or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability; and

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurements and unobservable (i.e., supported by little or no market activity).

The fair value measurements of the Company's cash equivalents and marketable securities are identified at the following levels within the fair value hierarchy (in thousands):

	December 31, 2023			
		Fair Value Measurement		
	Total	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds	$86,574	$86,574	$ —	$ —
Total measured at fair value	$86,574	$86,574	$ —	$ —

	June 30, 2024			
		Fair Value Measurement		
	Total	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds	$82,086	$82,086	$—	$ —
Commercial paper	33,648	—	33,648	—
U.S. treasury securities	10,439	—	10,439	—
U.S. government agency securities	1,985	—	1,985	—
Marketable securities, current:				
U.S. treasury securities	11,167	—	11,167	—
U.S. government agency securities	6,498	—	6,498	—
Marketable securities, non-current:				
U.S. government agency securities	5,920	—	5,920	—
Corporate debt securities	932	—	932	—
Total measured at fair value	$152,675	$82,086	$70,589	$ —

Available-for-Sale Marketable Securities

As of June 30, 2024, the Company's available-for-sale marketable securities consist of debt securities, including U.S. Treasury and agency securities, corporate debt securities and commercial paper. These available-for-sale marketable securities are carried at fair value and are included in the tables above. The

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

Company records an allowance for credit losses when unrealized losses are due to credit-related factors. At each reporting date, the Company evaluates securities with unrealized losses to determine whether such losses, if any, are due to credit-related factors. The Company evaluates, among others, whether the Company has the intention to sell any of these available-for-sale marketable securities and whether it is not more likely than not that the Company will be required to sell any of them before recovery of the amortized cost basis. Neither of these criteria were met in at June 30, 2024. The credit ratings of the securities held remain of the highest quality. Moreover, the Company continues to receive payments of interest and principal as they become due, and the Company's expectation is that those payments will continue to be received timely. Based on this evaluation, as of June 30, 2024, the Company determined that unrealized losses of its available-for-sale marketable securities were primarily attributable to changes in interest rates and non-credit related factors. As such, no allowances for credit losses were recorded at June 30, 2024. The Company did not hold available-for-sale marketable securities at December 31, 2023.

Interest receivable as of June 30, 2024 was $0.1 million and is recorded as a component of prepaid expenses and other current assets on the Company's condensed balance sheet. The Company did not have interest receivable at December 31, 2023.

As of June 30, 2024, all available-for-sale marketable securities in an unrealized loss position had been in an unrealized loss position for less than 12 months. As of June 30, 2024, the Company held 36 available-for-sale marketable securities which have been in an unrealized loss position for a period of less than 12 months.

As of June 30, 2024, the following table summarizes the amortized cost and the unrealized gains (losses) of the available-for-sale marketable securities presented within marketable securities, marketable securities, non-current and cash equivalents (in thousands):

	Remaining Contractual Maturity (in years)	Amortized Cost	Unrealized Gains	Unrealized Losses	Aggregate Estimated Fair Value
Commercial paper	Less than 1	$ 33,665	$ —	$ (17)	$ 33,648
U.S. treasury securities	Less than 1	21,605	1	—	21,606
U.S. government agency securities	Less than 1	8,487	—	(4)	8,483
Total maturity less than 1 year		63,757	1	(21)	63,737
Corporate debt securities	1 to 2	933	—	(1)	932
U.S. government agency securities	1 to 2	5,907	13	—	5,920
Total		$ 70,597	$ 14	$ (22)	$ 70,589

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

As of June 30, 2024, the following table summarizes available-for-sale marketable securities in an unrealized loss position (in thousands):

	Less than 12 Months	
	Fair Value	Gross Unrealized Loss
Commercial paper	$ 33,648	$ (17)
Corporate debt securities	467	(1)
U.S. treasury securities	4,411	—
U.S. government agency securities	8,981	(4)
Total	$ 47,507	$ (22)

5. Commitments and Contingencies

Legal Proceedings

In the ordinary course of business, the Company may be subject to legal proceedings, claims and litigation, as the Company operates in an industry susceptible to patent or other legal claims. The Company accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. As permitted under Delaware law and in accordance with its bylaws, the Company indemnifies its officers and directors for certain events or occurrences while the officer or director is or was serving in such capacity. The Company is also party to indemnification agreements with its officers and directors.

The Company also agreed to indemnify the investors against certain losses, claims or liabilities due to certain statements, omissions or violations by the Company if Company securities held by the investors are included in a registration statement. The certain statements, omissions or violations that are covered by these include, but are not limited to, (i) any untrue statement or alleged untrue statement of a material fact contained in the applicable registration statement, (ii) any omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, (iii) any violation or alleged violation by the Company of the Securities Act of 1933, as amended, the Exchange Act, and certain other securities laws. The Company will reimburse the investors for any legal or other expenses reasonably incurred by them in connection with investigating or defending such losses, claims, damages or liabilities.

The maximum potential amount of future payments that the Company could be required to make under these provisions is not determinable. The Company is not currently aware of any indemnification claims. Accordingly, the Company did not record any liabilities associated with these indemnification rights and agreements as of December 31, 2023 and June 30, 2024.

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

6. Convertible Preferred Stock

As of December 31, 2023, the Company's convertible preferred stock consisted of the following (in thousands, except for share and per share amounts):

Series	Authorized Shares	Issued and Outstanding	Carrying Value	Liquidation Preference	Conversion Price Per Share
Series A	75,000,000	75,000,000	$ 74,694	$ 75,000	$ 1.00000
Series B	121,657,452	60,828,720	74,521	75,000	1.23297

As of June 30, 2024, the Company's convertible preferred stock consisted of the following (in thousands, except for share and per share amounts):

Series	Authorized Shares	Issued and Outstanding	Carrying Value	Liquidation Preference	Conversion Price Per Share
Series A	75,000,000	75,000,000	$ 74,694	$ 75,000	$ 1.00000
Series B	121,657,452	121,657,452	149,463	150,000	1.23297

In June 2023 and July 2023, the Company issued 58.8 million and 2.0 million, respectively, shares of Series B Convertible Preferred Stock at an issuance price of $1.23297 per share for total net proceeds of $74.5 million under the first tranche.

In May 2024, the Company executed the second tranche of the Series B Convertible Preferred Stock financing arrangement and issued the remaining 60.8 million shares of Series B Convertible Preferred Stock for net proceeds of $74.9 million.

7. Common Stock

As of December 31, 2023 and June 30, 2024, the Company was authorized to issue 260.6 million shares of $0.001 par value common stock.

The Company reserved the following shares of common stock, on an as-converted basis, for future issuance:

	As of December 31, 2023	As of June 30, 2024
Series A Convertible Preferred Stock	8,710,490	8,710,490
Series B Convertible Preferred Stock	14,129,284	14,129,284
Restricted stock outstanding under 2021 Plan	774,225	594,741
Restricted stock outstanding outside of 2021 Plan	227,819	189,809
Options issued and outstanding under 2021 Plan	1,123,296	1,796,272
Shares reserved for future grants under 2021 Plan	1,634,488	966,626
	26,599,602	26,387,222

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

8. Stock-Based Compensation

Executive Officer and Director Equity Awards Modification

In May 2024, the Company's board of directors modified the terms of stock option awards for 1.3 million shares of the Company's common stock and restricted stock awards for 0.9 million shares of the Company's common stock to certain executive officers and members of the Company's board of directors. Under the modified terms, accelerated vesting provisions were added associated with certain change of control events. No incremental stock-based compensation expense was recognized as a result of the modification.

Restricted Stock Awards

The following summarizes restricted stock award activity under the 2021 Plan:

	Number of Shares Outstanding	Weighted-Average Grant Date Fair Value Per Share
Balance at December 31, 2023	774,225	$ 2.32
Restricted stock awards vested	(167,967)	2.58
Restricted stock awards repurchased	(11,517)	2.41
Balance at June 30, 2024	594,741	2.32

The following summarizes restricted stock award activity outside of the 2021 Plan:

	Number of Shares Outstanding	Weighted-Average Grant Date Fair Value Per Share
Balance at December 31, 2023	227,819	$ 3.79
Restricted stock awards vested	(38,010)	3.79
Balance at June 30, 2024	189,809	3.79

The total fair value of shares vested during the six months ended June 30, 2024 was $0.6 million.

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

Stock Options

The following summarizes stock option activity under the 2021 Plan:

	Options Outstanding			
	Total Options Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2023	1,123,296	$ 2.62	9.78	$ 2,287
Granted	695,739	2.76		
Exercised	(6,403)	1.68		
Forfeited	(16,215)	1.97		
Expired	(145)	2.76		
Outstanding as of June 30, 2024	1,796,272	2.68	9.45	5,862
Exercisable as of June 30, 2024	252,604	2.53	9.28	862
Vested and expected to vest as of June 30, 2024	1,796,272	2.68	9.45	5,862

The aggregate fair value of options that vested for the six months ended June 30, 2024 was $0.5 million. The options granted in the six months ended June 30, 2024 had a weighted-average per share grant-date fair value of $2.76 and a total grant date fair value of $1.9 million.

Stock Option Valuation

The weighted-average assumptions used to value employee and non-employee stock option awards granted under the 2021 Plan using the Black Scholes option pricing model, were as follows:

	Six Months Ended June 30,	
	2023	2024
Fair value of common stock	$ 2.76	$ 2.76
Risk-free interest rate	3.58%	4.25%
Expected volatility	80.6%	92.0%
Expected term (years)	6.00	5.99
Expected dividend yield	— %	— %

Stock-based Compensation Expense

Stock-based compensation expense for restricted stock awards and stock options recognized in the Company's condensed statements of operations and comprehensive loss is presented as follows (in thousands):

	Six Months Ended June 30,	
	2023	2024
Research and development expense	$ 409	$ 611
General and administrative expense	289	594
Total stock-based compensation expense	$ 698	$ 1,205

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

As of June 30, 2024, total unrecognized stock-based compensation expense related to unvested restricted stock awards and unvested stock options was $5.9 million, which is expected to be recognized over a weighted-average period of 2.8 years. As of June 30, 2024, total unrecognized stock-based compensation expense related to unvested restricted stock awards subject to performance conditions, which were improbable of achievement, was $0.3 million.

9. Related Parties

Third Rock Ventures

During the six months ended June 30, 2023, the Company issued a total of 12.4 million shares of its Series B Convertible Preferred Stock to Third Rock Ventures V, L.P., a holder of more than 5% of the Company's outstanding capital stock, during the first tranche closing, for cash proceeds of $15.2 million.

During the six months ended June 30, 2024, the Company issued a total of 12.4 million shares of its Series B Convertible Preferred Stock to Third Rock Ventures VI, L.P., a holder of more than 5% of the Company's outstanding capital stock, during the second tranche closing, for cash proceeds of $15.3 million.

For the six months ended June 30, 2023 and 2024, under the TRV service agreement, the Company incurred fees of $0.2 million and $0.1 million, respectively, which were recorded within general and administrative expenses in the Company's condensed statements of operations and comprehensive loss. As of December 31, 2023, outstanding accounts payable to TRV was $0.1 million. As of June 30, 2024, $0.1 million of expenses related to services provided by TRV were recorded within accrued expenses and other current liabilities.

For the six months ended June 30, 2023 and 2024, of the total fees under the TRV service agreement, $0.1 million and $0.1 million, respectively, were attributed to the Company's interim Chief Medical Officer. Additionally, the Company granted its interim Chief Medical Officer options to purchase 23,227 shares during the six months ended June 30, 2024, at exercise prices of $2.76 per share.

RA Capital

During the six months ended June 30, 2023, the Company issued a total of 12.2 million shares of its Series B Convertible Preferred Stock to entities affiliated with RA Capital Management, L.P. (collectively, "RA Capital"), which held more than 5% of the Company's outstanding capital stock, during the first tranche closing, for total cash proceeds of $15.0 million. During the six months ended June 30, 2024, the Company issued a total of 12.2 million shares of its Series B Convertible Preferred Stock to RA Capital during the second tranche closing, for total cash proceeds of $15.0 million.

Samsara BioCapital

During the six months ended June 30, 2023, the Company issued a total of 4.3 million shares of its Series B Convertible Preferred Stock to Samsara BioCapital, L.P. ("Samsara BioCapital"), a holder of more than 5% of the Company's outstanding capital stock, during the first tranche closing, for cash proceeds of $5.2 million. During the six months ended June 30, 2024, the Company issued a total of 4.3 million shares of its Series B Convertible Preferred Stock to Samsara BioCapital during the second tranche closing, for cash proceeds of $5.2 million.

SEPTERNA, INC.

Notes to the Condensed Financial Statements—(continued)
(Unaudited)

10. Net Loss Per Share

For all periods presented, diluted net loss per share is the same as basic net loss per share since the effect of including potential common shares is anti-dilutive. Potentially dilutive securities not included in the calculation of diluted net loss per share because to do so would be anti-dilutive were as follows (in common stock equivalent shares):

	Six Months Ended June 30,	
	2023	2024
Outstanding stock options	131,812	1,796,272
Unvested restricted stock subject to repurchase	1,174,390	711,193
Total antidilutive securities	1,306,202	2,507,465

11. Subsequent Events

The Company evaluated all subsequent events for recognition and measurement purposes through October 21, 2024 (including the impact of the reverse stock split as discussed in Note 1), the date the condensed financial statements were available for issuance. The Company has concluded that no subsequent events have occurred that require disclosure, except as described below.

On September 24, 2024, the Company appointed a full-time Chief Medical Officer to succeed the interim Chief Medical Officer.

In September 2024, the Company amended the 2021 Plan to, among other things, increase the shares reserved for issuance under the 2021 Plan to approximately 5.4 million shares.

In August and September 2024, the Company granted a total of 1.2 million shares of stock options to its employees and members of its board of directors, 0.6 million of which include vesting criteria subject to both service conditions and achievement of performance-based conditions, related to the consummation of the Company's IPO or a Sale Event, while the remainder include vesting criteria subject to service conditions only. 0.7 million of the stock options granted also include accelerated vesting provisions associated with certain change of control events.

10,937,500 Shares

Common Stock

Prospectus

J.P. Morgan **TD Cowen** **Cantor** **Wells Fargo Securities**

, 2024

Through and including , 2024 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Part II

INFORMATION NOT REQUIRED IN PROSPECTUS

Except where the context otherwise requires or where otherwise indicated, the terms "Septerna," "we," "us," "our," "our company," "the company," "registrant" and "our business" refer to Septerna, Inc.

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by us, other than underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the Securities and Exchange Commission (SEC) registration fee, the Financial Industry Regulatory Authority, Inc. (FINRA) filing fee and the Nasdaq Global Market (Nasdaq) listing fee.

	Amount to Be Paid
SEC registration fee	$ 32,738
FINRA filing fee	32,575
Nasdaq Global Market listing fee	295,000
Printing and mailing expenses	670,000
Legal fees and expenses	$ 2,675,000
Accounting fees and expenses	1,160,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous	29,687
Total	$ 4,900,000

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (DGCL) authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines, and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We will adopt provisions in our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and the amended and restated bylaws, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, that limit or eliminate the personal liability of our directors and officers to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, our directors and officers will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as directors or officers, except for liability for:

- any breach of their duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- for our directors, any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions;
- any transaction from which they derived an improper personal benefit; or
- for our officers, any derivative action by or in the right of the corporation.

These limitations of liability do not alter director and officer liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our amended and restated bylaws will provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and intend to enter into such agreements with our executive officers. These agreements provide that we will indemnify each of our directors, our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended (Securities Act).

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934, as amended.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding unregistered securities issued by us in the three years preceding the date of this registration statement. Also included is the consideration received by us for such securities and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

(a) Convertible Promissory Notes

From January 2020 through September 2021, we issued convertible promissory notes to Third Rock Ventures V, L.P. in an aggregate principal amount of $14.0 million. Each of the convertible promissory notes accrued interest at a rate of 6% per year and converted into shares of our Series A Convertible Preferred stock in November 2021, as further described below.

(b) Convertible Preferred Stock Issuances

From November 2021 through November 2022, we issued and sold an aggregate of 75,000,000 shares of our Series A Convertible Preferred stock in two closings, at a purchase price of $1.00 per share, for an aggregate purchase price of $75.0 million. Included in this amount was $14.7 million of the then outstanding principal and interest on convertible promissory notes issued to Third Rock Ventures V, L.P. in 2020 and 2021, all of which converted into shares of our Series A Convertible Preferred stock in this financing in accordance with their terms.

From June 2023 through May 2024, we issued and sold an aggregate of 121,657,452 shares of our Series B Convertible Preferred stock at a purchase price of $1.23297 per share for an aggregate purchase price of $150.0 million in multiple closings.

Every 8.6103 shares of our outstanding convertible preferred stock will convert into approximately one share of our common stock immediately prior to the completion of this offering.

The offers, sales and issuances of the securities described above were deemed to be exempt under Section 4(a)(2) of the Securities Act or Rule 506 of Regulation D under the Securities Act as a transaction by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about us. No underwriters were involved in these transactions.

(c) Grants and Exercises of Stock Options and Restricted Common Stock

Through October 2024, we have granted stock options to purchase an aggregate of 3,049,207 shares of our common stock, with exercise prices ranging from $1.55 to $6.81 per share, to our employees, directors and consultants pursuant to our 2021 Stock Option and Grant Plan, as amended from time to time (2021 Plan).

Through October 2024, we have granted an aggregate of 1,503,691 shares of restricted common stock to our employees, consultants and other service providers under the 2021 Plan and an additional 1,684,004 shares to our advisors and co-founders outside of the 2021 Plan.

The issuances of the securities under the 2021 Plan described above were deemed to be exempt from registration under Rule 701 promulgated under the Securities Act as transactions under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering. The recipients of such securities were our directors, employees or bona fide consultants and received the securities under our equity incentive plans. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

The issuance of the securities described above to advisors and co-founders outside of the 2021 Plan were deemed exempt from registration pursuant to Section 4(a)(2) of the Securities Act as transactions by an issuer not involving a public offering.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

Exhibit Number	Description
1.1	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended and currently in effect

Exhibit Number	Description
3.2	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect immediately prior to the completion of this offering
3.3*	Bylaws of the Registrant, as currently in effect
3.4	Form of Amended and Restated Bylaws of the Registrant, to be in effect as of the effectiveness of the registration statement of which this prospectus forms a part
4.1+*	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated as of June 28, 2023
4.2	Specimen Common Stock Certificate
5.1	Opinion of Goodwin Procter LLP
10.1#*	2021 Stock Option and Grant Plan, as amended, and forms of award agreements thereunder
10.2#	2024 Stock Option and Incentive Plan and forms of award agreements thereunder
10.3#	2024 Employee Stock Purchase Plan
10.4#	Form of Non-Employee Director Indemnification Agreement, by and between the Registrant and each of its non-employee directors
10.5#	Form of Employee Director / Officer Indemnification Agreement, by and between the Registrant and each of its executive officers
10.6#+	Employment Agreement, by and between the Registrant and Jeffrey Finer, dated as of September 9, 2022
10.7#+	Employment Agreement, by and between the Registrant and Ran Xiao, dated as of January 18, 2022
10.8#+	Employment Agreement, by and between the Registrant and Liz Bhatt, dated as of May 20, 2022
10.9#+	Employment Agreement, by and between the Registrant and Jae B. Kim, dated as of September 4, 2024
10.10#+	Employment Agreement, by and between the Registrant and Samira Shaikhly, dated as of December 22, 2022
10.11#+	Employment Agreement, by and between the Registrant and Uwe Klein, dated as of February 17, 2021
10.12#+	Employment Agreement, by and between the Registrant and Daniel Long, dated as of September 27, 2021
10.13#	Non-Employee Director Compensation Policy
10.14#	Senior Executive Cash Incentive Bonus Plan
10.15#	Compensation Recovery Policy
10.16#	Executive Severance Plan
10.17+*	Lease Agreement, by and between the Registrant and Britannia Pointe Grant Limited Partnership, dated as of April 20, 2021, as amended by the First Amendment to Lease Agreement dated as of September 14, 2022, Second Amendment to Lease Agreement dated as of September 23, 2022, Third Amendment to Lease Agreement dated as of December 22, 2022, and Fourth Amendment to Lease Agreement dated as of December 12, 2023
10.18*	Service Agreement, by and between the Registrant and Third Rock Ventures, LLC, dated as of August 25, 2021
21.1*	Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm

Exhibit Number	Description
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on signature page)
107	Filing Fee Table

* Previously filed.
\# Indicates a management contract or any compensatory plan, contract or arrangement
\+ Annexes, schedules and/or exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The registrant agrees to furnish supplementally a copy of any omitted attachment to the SEC on a confidential basis upon request.

(b) Financial Statements Schedules

None.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, California, on the 21st day of October, 2024.

SEPTERNA, INC.

By: /s/ Jeffrey Finer, M.D., Ph.D.
Name: Jeffrey Finer, M.D., Ph.D.
Title: President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement and power of attorney has been signed by the following person in the capacities and on the date indicated.

Name	Title	Date
/s/ Jeffrey Finer, M.D., Ph.D. Jeffrey Finer, M.D., Ph.D.	President and Chief Executive Officer (principal executive officer)	October 21, 2024
/s/ Ran Xiao, M.B.A., CFA Ran Xiao, M.B.A., CFA	Interim Chief Financial Officer, Vice President of Finance and Business Operations (principal financial officer and principal accounting officer)	October 21, 2024
* Jeffrey Tong, Ph.D.	Chairman and Director	October 21, 2024
* Abraham Bassan, M.S.	Director	October 21, 2024
* Bernard Coulie, M.D., Ph.D., M.B.A.	Director	October 21, 2024
* Alan Ezekowitz, M.D., D.Phil.	Director	October 21, 2024

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Name	Title	Date
*	Director	October 21, 2024
Shalini Sharp, M.B.A.		
*	Director	October 21, 2024
Jake Simson, Ph.D.		

* By: /s/ Jeffrey Finer, M.D., Ph.D.
Jeffrey Finer, M.D., Ph.D.
Attorney-in-Fact

Exhibit 1.1

Septerna, Inc.

[•] Shares of Common Stock, par value $0.001 per share

Underwriting Agreement

[•], 2024

J.P. Morgan Securities LLC
TD Securities (USA) LLC
Cantor Fitzgerald & Co.
Wells Fargo Securities, LLC

As Representatives of the
several Underwriters listed
in Schedule 1 hereto

c/o J.P. Morgan Securities LLC
383 Madison Avenue
New York, New York 10179

c/o TD Securities (USA) LLC
1 Vanderbilt Avenue
New York, New York 10017

c/o Cantor Fitzgerald & Co.
110 East 59th Street
New York, New York 10022

c/o Wells Fargo Securities, LLC
500 West 33rd Street, 14th Floor
New York, New York 10001

Ladies and Gentlemen:

Septerna, Inc., a Delaware corporation (the "Company"), proposes to issue and sell to the several underwriters listed in Schedule 1 hereto (the "Underwriters"), for whom J.P. Morgan Securities LLC ("JPM"), TD Securities (USA) LLC ("TD Cowen"), Cantor Fitzgerald & Co. ("Cantor") and Wells Fargo Securities, LLC ("Wells Fargo") are acting as Representatives (the "Representatives"), an aggregate of [•] shares of common stock, par value $0.001 per share ("Common Stock"), of the Company (the "Underwritten Shares") and, at the option of the Underwriters, up to an additional [•] shares of Common Stock (the "Option Shares"). The Underwritten Shares and the Option Shares are herein referred to as the "Shares." The shares of Common Stock to be outstanding after giving effect to the sale of the Shares are referred to herein as the "Stock."

The Company hereby confirms its agreement with the several Underwriters concerning the purchase and sale of the Shares, as follows:

1. Registration Statement. The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Securities Act"), a registration statement on Form S-1 (File No. 333-282469), including a prospectus, relating to the Shares. Such registration statement, as amended at the time it became effective, including the information, if any, deemed pursuant to Rule 430A, 430B or 430C under the Securities Act to be part of the registration statement at the time of its effectiveness ("Rule 430 Information"), is referred to herein as the "Registration Statement"; and as used herein, the term "Preliminary Prospectus" means each prospectus included in such registration statement (and any amendments thereto) before effectiveness, any prospectus filed with the Commission pursuant to Rule 424(a) under the Securities Act and the prospectus included in the Registration Statement at the time of its effectiveness that omits Rule 430 Information, and the term "Prospectus" means the prospectus in the form first used (or made available upon request of purchasers pursuant to Rule 173 under the Securities Act) in connection with confirmation of sales of the Shares. If the Company has filed an abbreviated registration statement pursuant to Rule 462(b) under the Securities Act (the "Rule 462 Registration Statement"), then any reference herein to the term "Registration Statement" shall be deemed to include such Rule 462 Registration Statement. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement and the Prospectus.

At or prior to the Applicable Time (as defined below), the Company had prepared the following information (collectively with the pricing information set forth on Annex A, the "Pricing Disclosure Package"): a Preliminary Prospectus dated [•], 2024 and each "free-writing prospectus" (as defined pursuant to Rule 405 under the Securities Act) listed on Annex A hereto.

"Applicable Time" means [•] [A/P].M., New York City time, on [•], 2024.

2. Purchase of the Shares.

(a) The Company agrees to issue and sell the Underwritten Shares to the several Underwriters as provided in this underwriting agreement (this "Agreement"), and each Underwriter, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees, severally and not jointly, to purchase at a price per share of $[•] (the "Purchase Price") from the Company the respective number of Underwritten Shares set forth opposite such Underwriter's name in Schedule 1 hereto.

In addition, the Company agrees to issue and sell the Option Shares to the several Underwriters as provided in this Agreement, and the Underwriters, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, shall have the option to purchase, severally and not jointly, from the Company the Option Shares at the Purchase Price less an amount per share equal to any dividends or distributions declared by the Company and payable on the Underwritten Shares but not payable on the Option Shares.

If any Option Shares are to be purchased, the number of Option Shares to be purchased by each Underwriter shall be the number of Option Shares which bears the same ratio to the aggregate number of Option Shares being purchased as the number of Underwritten Shares set forth opposite the name of such Underwriter in Schedule 1 hereto (or such number increased as set forth in Section 10 hereof) bears to the aggregate number of Underwritten Shares being purchased from the Company by the several Underwriters, subject, however, to such adjustments to eliminate any fractional Shares as the Representatives in their sole discretion shall make.

The Underwriters may exercise the option to purchase Option Shares at any time in whole, or from time to time in part, on or before the thirtieth day following the date of the Prospectus, by written notice from the Representatives to the Company. Such notice shall set forth the aggregate number of Option Shares as to which the option is being exercised and the date and time when the Option Shares are to be delivered and paid for, which may be the same date and time as the Closing Date (as hereinafter defined) but shall not be earlier than the Closing Date nor later than the tenth full business day (as hereinafter defined) after the date of such notice (unless such time and date are postponed in accordance with the provisions of Section 10 hereof). Any such notice shall be given at least two business days prior to the date and time of delivery specified therein.

(b) The Company understands that the Underwriters intend to make a public offering of the Shares, and initially to offer the Shares on the terms set forth in the Pricing Disclosure Package. The Company acknowledges and agrees that the Underwriters may offer and sell Shares to or through any affiliate of an Underwriter.

(c) Payment for the Shares shall be made by wire transfer in immediately available funds to the account specified by the Company to the Representatives in the case of the Underwritten Shares, at the offices of Cooley LLP, counsel for the Underwriters, at 3 Embarcadero Center, 20th Floor, San Francisco, California 94111-4004, at 10:00 A.M., New York City time, on [•], 2024, or at such other time or place on the same or such other date, not later than the fifth business day thereafter, as the Representatives and the Company may agree upon in writing or, in the case of the Option Shares, on the date and at the time and place specified by the Representatives in the written notice of the Underwriters' election to purchase such Option Shares. The time and date of such payment for the Underwritten Shares is referred to herein as the "Closing Date," and the time and date for such payment for the Option Shares, if other than the Closing Date, is herein referred to as the "Additional Closing Date."

Payment for the Shares to be purchased on the Closing Date or the Additional Closing Date, as the case may be, shall be made against delivery to the Representatives for the respective accounts of the several Underwriters of the Shares to be purchased on such date or the Additional Closing Date, as the case may be, with any transfer taxes payable in connection with the sale of such Shares duly paid by the Company. Delivery of the Shares shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

(d) The Company acknowledges and agrees that the Representatives and the other Underwriters are acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Shares contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. Additionally, neither the Representatives nor any other Underwriter is advising the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company shall consult with its own

advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and neither the Representatives nor the other Underwriters shall have any responsibility or liability to the Company with respect thereto. Any review by the Representatives and the other Underwriters of the Company, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Underwriters and shall not be on behalf of the Company.

3. Representations and Warranties of the Company. The Company represents and warrants to each Underwriter that:

(a) *Preliminary Prospectus.* No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission, and each Preliminary Prospectus included in the Pricing Disclosure Package, at the time of filing thereof, complied in all material respects with the Securities Act, and no Preliminary Prospectus, at the time of filing thereof, contained any untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in any Preliminary Prospectus, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(b) *Pricing Disclosure Package*. The Pricing Disclosure Package as of the Applicable Time did not, and as of the Closing Date and as of the Additional Closing Date, as the case may be, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in such Pricing Disclosure Package, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof. No statement of material fact included in the Prospectus has been omitted from the Pricing Disclosure Package and no statement of material fact included in the Pricing Disclosure Package that is required to be included in the Prospectus has been omitted therefrom.

(c) *Issuer Free Writing Prospectus.* Other than the Registration Statement, the Preliminary Prospectus and the Prospectus, the Company (including its agents and representatives, other than the Underwriters in their capacity as such) has not prepared, made, used, authorized, approved or referred to and will not prepare, make, use, authorize, approve or refer to any "written communication" (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or solicitation of an offer to buy the Shares (each such communication by the Company or its agents and representatives

(other than a communication referred to in clause (i) below) an "Issuer Free Writing Prospectus") other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) the documents listed on Annex A hereto, each electronic road show and any other written communications approved in writing in advance by the Representatives. Each such Issuer Free Writing Prospectus complies in all material respects with the Securities Act, has been or will be (within the time period specified in Rule 433 under the Securities Act) filed in accordance with the Securities Act (to the extent required thereby) and does not conflict with the information contained in the Registration Statement or the Pricing Disclosure Package, and, when taken together with the Preliminary Prospectus accompanying, or delivered prior to delivery of, such Issuer Free Writing Prospectus, did not, and as of the Closing Date and as of the Additional Closing Date, as the case may be, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in each such Issuer Free Writing Prospectus or Preliminary Prospectus in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in such Issuer Free Writing Prospectus or Preliminary Prospectus, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(d) *Emerging Growth Company*. From the time of initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication undertaken in reliance on Section 5(d) of the Securities Act) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "Emerging Growth Company"). "Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on either Section 5(d) of, or Rule 163B under, the Securities Act.

(e) *Testing-the-Waters Materials.* The Company (i) has not alone engaged in any Testing-the-Waters Communications other than Testing-the-Waters Communications with the consent of the Representatives (x) with entities that are qualified institutional buyers ("QIBs") within the meaning of Rule 144A under the Securities Act or institutions that are accredited investors within the meaning of Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act ("IAIs") and otherwise in compliance with the requirements of Section 5(d) of the Securities Act or (y) with entities that the Company reasonably believed to be QIBs or IAIs and otherwise in compliance with the requirements of Rule 163B under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications by virtue of a writing substantially in the form of Exhibit D hereto. The Company has not distributed or approved for distribution any Written Testing-the-Waters Communications other than those listed on

Annex B hereto. "Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act. Any individual Written Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement or the Pricing Disclosure Package, complied in all material respects with the Securities Act, and when taken together with the Pricing Disclosure Package as of the Applicable Time, did not, and as of the Closing Date and as of the Additional Closing Date, as the case may be, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(f) *Registration Statement and Prospectus.* The Registration Statement has been declared effective by the Commission. No order suspending the effectiveness of the Registration Statement has been issued by the Commission, and no proceeding for that purpose or pursuant to Section 8A of the Securities Act against the Company or related to the offering of the Shares has been initiated or, to the knowledge of the Company, threatened by the Commission; as of the applicable effective date of the Registration Statement and any post-effective amendment thereto, the Registration Statement and any such post-effective amendment complied and will comply in all material respects with the Securities Act, and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading; and as of the date of the Prospectus and any amendment or supplement thereto and as of the Closing Date and as of the Additional Closing Date, as the case may be, the Prospectus complied with and will comply in all material respects with the Securities Act and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement and the Prospectus and any amendment or supplement thereto, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(g) *Financial Statements.* The financial statements (including the related notes thereto) of the Company included in the Registration Statement, the Pricing Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and present fairly in all material respects the financial position of the Company as of the dates indicated and the results of its operations and the changes in its cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles ("GAAP") in the United States applied on a consistent basis throughout the periods covered thereby, except in the case of any unaudited financial statements, which are subject to normal year-end adjustments and do not contain certain footnotes as permitted by the applicable rules of the Commission, and any supporting schedules included in the Registration Statement present fairly in all material respects the information required to be stated

therein; and the other financial information included in the Registration Statement, the Pricing Disclosure Package and the Prospectus has been derived from the accounting records of the Company and presents fairly in all material respects the information shown thereby; and the pro forma financial information and the related notes thereto included in the Registration Statement, the Pricing Disclosure Package and the Prospectus have been prepared in accordance with the appliable requirements of the Securities Act and the assumptions underlying such pro forma financial information are reasonable and set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus. There are no disclosures included in the Registration Statement, the Pricing Disclosure Package and the Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) that are subject to Regulation G of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Item 10 of Regulation S-K of the Securities Act.

(h) *No Material Adverse Change.* Since the date of the most recent financial statements of the Company included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (i) there has not been any change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Registration Statement, the Pricing Disclosure Package and the Prospectus), short-term debt or long-term debt of the Company, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company; (ii) the Company has not entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company or incurred any liability or obligation, direct or contingent, that is material to the Company; and (iii) the Company has not sustained any loss or interference with its business that is material to the Company and that is either from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, except in each case as otherwise described in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(i) *Organization and Good Standing.* The Company has been duly organized and is validly existing and in good standing under the law of its jurisdiction of organization, is duly qualified to do business and is in good standing in each jurisdiction in which its ownership or lease of property or the conduct of its business requires such qualification, and has all power and authority necessary to own or hold its properties and to conduct the business in which it is engaged, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a material adverse effect on the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company or on the performance by the Company of its obligations under this Agreement (a "Material Adverse Effect").

(j) *Capitalization.* The Company has an authorized capitalization as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading "Capitalization" and "Description of capital stock"; all the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights that have not been duly waived or satisfied; except as described in or expressly contemplated by the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options; and the capital stock of the Company conforms in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(k) *Stock Options.* With respect to the stock options (the "Stock Options") granted pursuant to the stock-based compensation plans of the Company (the "Company Stock Plans"), except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (i) each Stock Option intended to qualify as an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code") so qualifies, (ii) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, (iii) each such grant was made in accordance with the terms of the Company Stock Plans and all other applicable laws and regulatory rules or requirements, including the rules of the Nasdaq Global Market (the "Nasdaq Market") and any other exchange on which Company securities are traded, and (iv) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company. Each Company Stock Plan is accurately described in all material respects in the Registration Statement, the Pricing Disclosure Package and the Prospectus. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company of granting, Stock Options prior to, or otherwise coordinating the grant of Stock Options with, the release or other public announcement of material information regarding the Company or its results of operations or prospects.

(l) *Due Authorization.* The Company has full right, power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and all action required to be taken for the due and proper authorization, execution and delivery by it of this Agreement and the consummation by it of the transactions contemplated hereby has been duly and validly taken.

(m) *Underwriting Agreement.* This Agreement has been duly authorized, executed and delivered by the Company.

(n) *The Shares.* The Shares to be issued and sold by the Company hereunder have been duly authorized by the Company and, when issued and delivered and paid for as provided herein, will be duly and validly issued, will be fully paid and nonassessable and will conform to the descriptions thereof in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights that have not been duly waived or satisfied.

(o) *Listing*. The Shares have been approved for listing on the Nasdaq Market, subject to notice of issuance.

(p) *Description of the Underwriting Agreement.* This Agreement conforms in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(q) *No Violation or Default.* The Company is not (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any property or asset of the Company is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, have a Material Adverse Effect.

(r) *No Conflicts.* The execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares and the consummation of the transactions contemplated by this Agreement or the Pricing Disclosure Package and the Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, result in the termination, modification or acceleration of, or result in the creation or imposition of any lien, charge or encumbrance upon any property, right or asset of the Company pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any property, right or asset of the Company is subject, (ii) result in any violation of the provisions of the charter or by-laws or similar organizational documents of the Company or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation, default, lien, charge or encumbrance that would not, individually or in the aggregate, have a Material Adverse Effect.

(s) *No Consents Required.* No consent, approval, authorization, order, registration or qualification of or with any court or arbitrator or governmental or regulatory authority is required for the execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares and the consummation of the transactions contemplated by this Agreement, except for the registration of the Shares under the Securities Act and such consents, approvals, authorizations, orders and registrations or qualifications as may be required by the Financial Industry Regulatory Authority, Inc. ("FINRA") and under applicable state securities laws in connection with the purchase and distribution of the Shares by the Underwriters.

(t) *Legal Proceedings.* There are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings ("Actions") pending to which the Company is or may be a party or to which any property of the Company is or may be the subject that, individually or in the aggregate, if determined adversely to the Company, could reasonably be expected to have a Material Adverse Effect; to the knowledge of the Company, no such Actions are threatened or contemplated by any governmental or regulatory authority or threatened by others; and (i) there are no current or pending Actions that are required under the Securities Act to be described in the Registration Statement, the Pricing Disclosure Package or the Prospectus that are not so described in the Registration Statement, the Pricing Disclosure Package and the Prospectus and (ii) there are no statutes, regulations or contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Disclosure Package or the Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(u) *Independent Accountants*. Ernst & Young LLP, who has certified certain financial statements of the Company, is an independent registered public accounting firm with respect to the Company within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act.

(v) *Title to Real and Personal Property*. The Company has good and marketable title in fee simple to, or have valid rights to lease or otherwise use, all items of real and personal property that are material to the business of the Company, in each case free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company or (ii) could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

(w) *Title to Intellectual Property*. The Company owns, or possesses valid and enforceable licensed rights to use, all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, trade dress, designs, data, database rights, Internet domain names, copyrights, works of authorship, licenses, proprietary information and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) necessary for the conduct of its business as currently conducted and as proposed to be conducted (collectively, "Intellectual Property"), and, to the Company's knowledge, the conduct of its business does not and will not infringe, misappropriate or

otherwise conflict with any such rights of others. The Intellectual Property of the Company has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part, and the Company is unaware of any facts which would form a reasonable basis for any such adjudication. The Company has not received any notice of any claim of infringement, misappropriation or conflict with any intellectual property rights of another, and the Company is unaware of any facts which would form a reasonable basis for any such notice or claim. To the Company's knowledge: (i) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus ("Disclosure Documents") as owned by or licensed to the Company; and (ii) there is no infringement by third parties of any Intellectual Property. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company's rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim, other than routine patent prosecution activities; or (C) asserting that the Company infringes, misappropriates, or otherwise violates, or would, upon the commercialization of any product or service described in the Disclosure Documents as under development, infringe, misappropriate, or otherwise violate, any intellectual property rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. The Company has complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company, and all such agreements are in full force and effect. To the Company's knowledge, there are no material defects in any of the patents or patent applications included in the Intellectual Property. The Company has taken all reasonable steps to protect, maintain and safeguard their Intellectual Property, including the execution of appropriate nondisclosure, confidentiality agreements and invention assignment agreements and invention assignments with their employees, and, to the Company's knowledge, no employee of the Company is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement, or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company. To the Company's knowledge, the duty of candor and good faith as required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with; and in all foreign offices having similar requirements, all such requirements have been complied with. To the Company's knowledge, none of the Company owned Intellectual Property or technology (including information technology and outsourced arrangements) employed by the Company has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or any of its officers, directors or employees or otherwise in violation of the rights of any persons. All licenses for the use of the intellectual property rights described in the Disclosure Documents are

valid, binding upon, and enforceable by or against the parties thereto in accordance with their terms. The Company has complied in all material respects with, and is not in breach nor has received any asserted or threatened claim of breach of any Intellectual Property license, and the Company has no knowledge of any breach or anticipated breach by any other person to any Intellectual Property license. The product candidates described in the Disclosure Documents as under development by the Company fall within the scope of the claims of one or more patent applications owned by the Company.

(x) *Trade Secrets*. The Company has taken reasonable and customary actions to protect its rights in and to prevent the unauthorized use and disclosure of material trade secrets and confidential business information (including confidential source code, ideas, research and development information, know-how, formulas, compositions, technical data, designs, drawings, specifications, research records, records of inventions, test information, financial, marketing and business data, customer and supplier lists and information, pricing and cost information, business and marketing plans and proposals) owned by the Company, and, there has been no unauthorized use or disclosure.

(y) *IT Assets, Data Privacy and Security*. The computers, websites, applications, databases, software, servers, networks, data communications lines, and other information technology systems owned, licensed, leased or otherwise used by the Company (including any third party technology or services used by the Company but excluding any public networks) (collectively, the "IT Assets") are, in all material respects, adequate for, and operate and perform for, the operation of the business of the Company as currently conducted and as proposed to be conducted as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus. To the Company's knowledge, the IT Assets are free and clear of all viruses, vulnerabilities, bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company has at all times implemented and maintained reasonable controls, policies, procedures, and safeguards designed to maintain and protect the privacy, confidentiality, integrity, continuous operation, redundancy and security of all IT Assets and Confidential Data ("Confidential Data" is defined as all Personal Data (defined below), sensitive, confidential, or regulated data) used in connection with its business. There have been no material breaches of, violations of, outages of, or unlawful or unauthorized uses of, destruction of, losses of, alterations of, or accesses to IT Assets and no unlawful or unauthorized uses of, destruction of, losses of, alterations of, or accesses to Confidential Data, nor are any such incidents under internal review or investigation. The Company complies, and has at all times complied in all material respects, with all (i) applicable laws, statutes, regulations, directives, and industry standards concerning the protection, collection, use, disclosure, transfer, storage, disposal, privacy, confidentiality, integrity, security, or other processing of Personal Data (including without limitation, in each case as applicable, the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") as amended by the Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"); the European Union General Data Protection Regulation ("GDPR") (EU 2016/679); and the California Consumer Privacy Act ("CCPA") as modified by the California Privacy Rights Act, and other similar state privacy laws (collectively, the "Privacy Laws")), (ii) all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, (iii) the

Company's published internal policies and procedures, and (iv) contractual obligations, in each case of (i)-(iv), relating to the privacy and security of IT Assets and Confidential Data and to the protection of such IT Assets and Confidential Data from unlawful or unauthorized use, destruction, loss, alteration, access, misappropriation or modification (collectively, the "Data Protection Requirements"). The Company has at all times made all required disclosures to and obtained all necessary consents from individuals required under applicable Data Protection Requirements (including, without limitation, clinical trial participants, customers, users, and personnel) for the Company's collection, use, disclosure, transfer, and other processing of Personal Data, and has complied with all such disclosures and consents in all material respects. None of such disclosures made or contained in any policies or notices have been inaccurate, misleading, deceptive, incomplete, or in violation of any Data Protection Requirements. "Personal Data" means (i) any information which would qualify as "personally identifying information," "personal information," "personally identifying information," or similar term as defined by Privacy Laws; (ii) Protected Health Information as defined by HIPAA;; or (iii) any other piece of information that that relates to an identified or identifiable natural person, or that is reasonably capable of being used to identify, contact, or precisely locate a natural person.

(z) *No Complaints*. The Company has no knowledge of any fact or circumstance that would reasonably indicate the Company is not in compliance with any applicable Data Protection Requirements. There has been no complaint or audit, proceeding, investigation (formal or informal) written demand or claim made against the Company, and none are currently pending against the Company, by any person, government entity, regulator, group or other party in respect of the collection, use, disclosure, transfer or other processing of Personal Data by the Company, including without limitation, by any state Attorney General or related office, the Federal Trade Commission, the U.S. Department of Health and Human Services and any office contained therein, or any similar authority in any jurisdiction other than the United States or any other governmental entity, and, to the Company's knowledge, no such complaint, audit, proceeding, investigation or claim is or has been threatened in writing.

(aa) *FDA Compliance*. The Company: (A) is and at all times has been in material compliance with all statutes, rules or regulations of the U.S. Food and Drug Administration ("FDA") and other comparable governmental entities applicable to the ownership, testing, development, manufacture, packaging, processing, use, labeling, storage, import, export, marketing, promotion or disposal of any product candidate under development or manufactured by the Company to the extent applicable ("Applicable Laws"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other written correspondence or notice from the FDA or any other comparable governmental entity alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (D) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or

other action from the FDA or any other comparable governmental entity or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received written notice that the FDA or any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any governmental entity is considering such action; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(bb) *Tests and Preclinical and Clinical Trials*. The studies, tests and preclinical and clinical trials conducted with the product candidates described in the Disclosure Documents, or to the Company's knowledge, on behalf of the Company, were and, if still ongoing, are being conducted in all material respects in accordance with all Authorizations and Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder and current Good Clinical Practices and Good Laboratory Practices and any applicable rules, regulations and policies of the jurisdiction in which such trials and studies are being conducted; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus are, to the Company's knowledge, accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, the Pricing Disclosure Package and the Prospectus when viewed in the context in which such results are described and the clinical state of development; and the Company has not received any written notices or correspondence from the FDA or any governmental entity requiring the termination or suspension of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials.

(cc) *Compliance with Health Care Laws*. The Company and, to the Company's knowledge, its directors, officers, employees, independent contractors, agents and affiliates are, and at all times have been, in material compliance with all applicable Health Care Laws. For purposes of this Agreement, "Health Care Laws" means applicable provisions of: (i) the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Statements Law (42 U.S.C. Section 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286, 287 and 1349, the health care fraud criminal

provisions under HIPAA, the civil monetary penalties law (42 U.S.C. Section 1320a-7a), the exclusions law (42 U.S.C. Section 1320a-7), the U.S. Physician Payments Sunshine Act (42 U.S.C Section 1320-7h), HIPAA, as amended by HITECH (42 U.S.C. §§ 17921 et seq.), and the laws governing U.S. government funded or sponsored healthcare programs; and (iii) all other local, state, federal, national laws, relating to the regulation of the Company. Neither the Company nor, to the Company's knowledge, any of its officers, directors, employees or agents have engaged in activities which could reasonably be concluded are, as applicable, cause for liability under a Health Care Law. The Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority alleging that any product, operation or activity is in violation of any Health Care Laws nor, to the Company's knowledge, has any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action been threatened in writing. The Company is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority or body. Additionally, neither the Company nor, to the Company's knowledge, any of its employees, officers, directors, independent contractors, affiliates or agents has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension or exclusion, or engaged in any conduct that would reasonably be expected to result in such debarment, suspension, or exclusion.

(dd) *No Undisclosed Relationships*. No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers, suppliers or other affiliates of the Company, on the other, that is required by the Securities Act to be described in each of the Registration Statement and the Prospectus and that is not so described in such documents and in the Pricing Disclosure Package.

(ee) *Investment Company Act*. The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, will not be required to register as an "investment company" or an entity "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Investment Company Act").

(ff) *Taxes.* The Company has paid all federal, state, local and foreign taxes and filed all tax returns required to be paid or filed through the date hereof (taking into account any extensions permitted by law), and there is no tax deficiency that has been, or could reasonably be expected to be, asserted against the Company or any of its properties or assets, in each case to the extent the failure to pay or such tax deficiency would be materially adverse to the Company.

(gg) *Licenses and Permits.* The Company possesses, and is in compliance with the terms of, all licenses, sub-licenses, certificates, permits and other authorizations issued by, and has made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of its properties or the conduct of its business as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the Company has not received notice of any revocation or modification of any such license, sub-license, certificate, permit or authorization or has any reason to believe that any such license, sub-license, certificate, permit or authorization will not be renewed in the ordinary course. The Company has fulfilled and performed all of its obligations with respect to the licenses, and, to the Company's knowledge, no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other impairment of the rights of the holder. No party granting any such licenses, certificates, permits and other authorizations has taken any action to limit, suspend or revoke the same in any material respect. The Company has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission) as required for maintenance of their licenses, certificates, permits and other authorizations that are necessary for the conduct of its businesses.

(hh) *No Labor Disputes.* No labor disturbance by or dispute with employees of the Company exists or, to the knowledge of the Company, is contemplated or threatened, and the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of its principal suppliers, contractors or customers, except as would not have a Material Adverse Effect. The Company has not received any notice of cancellation or termination with respect to any collective bargaining agreement to which it is a party.

(ii) *Certain Environmental Matters*. (i) The Company (x) is in compliance with all, and has not violated any, applicable federal, state, local and foreign laws (including common law), rules, regulations, requirements, decisions, judgments, decrees, orders and other legally enforceable requirements relating to pollution or the protection of human health or safety, the environment, natural resources, hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "Environmental Laws"); (y) has received and is in compliance with all, and has not violated any, permits, licenses, certificates or other authorizations or approvals required of them under any Environmental Laws to conduct its business; and (z) has not received notice of any actual or potential liability or obligation under or relating to, or any actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company, except in the case of each of (i) and (ii) above, for any such matter as would not, individually or in the aggregate, reasonably

be expected to have a Material Adverse Effect; and (iii) (x) there is no proceeding that is pending, or that is known to be contemplated, against the Company under any Environmental Laws in which a governmental entity is also a party, other than such proceeding regarding which it is reasonably believed no monetary sanctions of $100,000 or more will be imposed, (y) the Company is not aware of any facts or issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company, and (z) the Company does not anticipate material capital expenditures relating to any Environmental Laws.

(jj) *Compliance with ERISA*. (i) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), for which the Company or any member of its "Controlled Group" (defined as any entity, whether or not incorporated, that is under common control with the Company within the meaning of Section 4001(a)(14) of ERISA or any entity that would be regarded as a single employer with the Company under Section 414(b),(c),(m) or (o) of the Code) would have any liability (each, a "Plan") has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption; (iii) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no Plan has failed (whether or not waived), or is reasonably expected to fail, to satisfy the minimum funding standards (within the meaning of Section 302 of ERISA or Section 412 of the Code) applicable to such Plan; (iv) no Plan is, or is reasonably expected to be, in "at risk status" (within the meaning of Section 303(i) of ERISA) and no Plan that is a "multiemployer plan" within the meaning of Section 4001(a)(3) of ERISA is in "endangered status" or "critical status" (within the meaning of Sections 304 and 305 of ERISA) (v) the fair market value of the assets of each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan); (vi) no "reportable event" (within the meaning of Section 4043(c) of ERISA and the regulations promulgated thereunder) has occurred or is reasonably expected to occur; (vii) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, to the knowledge of the Company, whether by action or by failure to act, which would cause the loss of such qualification; (viii) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guarantee Corporation, in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan" within the meaning of Section 4001(a)(3) of ERISA); and (ix) none of the following events has occurred or is reasonably likely to occur: (A) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company or its Controlled Group affiliates in the current fiscal year of the Company and its Controlled Group affiliates compared to the amount of such contributions made in the Company's and its Controlled Group affiliates' most recently completed fiscal year; or (B) a material increase in the Company's "accumulated post-

retirement benefit obligations" (within the meaning of Accounting Standards Codification Topic 715-60) compared to the amount of such obligations in the Company's most recently completed fiscal year, except in each case with respect to the events or conditions set forth in (i) through (ix) hereof, as would not, individually or in the aggregate, have a Material Adverse Effect.

(kk) *Disclosure Controls*. The Company maintains an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure. To the extent applicable as of the date of this Agreement, the Company has carried out evaluations of the effectiveness of their disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

(ll) *Accounting Controls.* The Company maintains systems of "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that are designed to comply with the applicable requirements of the Exchange Act and have been designed by, or under the supervision of, its principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The Company maintains internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. There are no material weaknesses in the Company's internal controls. The Company's auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which have adversely affected or are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting.

(mm) *Insurance.* The Company has insurance covering its properties, operations, personnel and business, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as the Company reasonably believes are adequate to protect the Company and its business; and the Company has not (i) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (ii) any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business.

(nn) *No Unlawful Payments.* Neither the Company nor any director, officer or employee of the Company nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any foreign or domestic government official or employee, including of any government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company will not use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-bribery or anti-corruption laws. The Company has instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote compliance with all applicable anti-bribery and anti-corruption laws.

(oo) *Compliance with Anti-Money Laundering Laws*. The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable money laundering statutes of all jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the "Anti-Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(pp) *No Conflicts with Sanctions Laws.* Neither the Company nor any of its directors or officers, nor, to the knowledge of the Company, any of its employees or agents is or is 50% or more owned or, as applicable, controlled by one or more persons that are currently the subject or the target of any sanctions administered or enforced by the U.S. government, (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State and including,

without limitation, the designation as a "specially designated national" or "blocked person"), the United Nations Security Council, the European Union, His Majesty's Treasury or other applicable sanctions authority (collectively, "Sanctions"), , nor is the Company or any of its directors, officers, employees, or to the Company's knowledge, any Company agents, located, organized or ordinarily resident in a country or territory that is the subject or target of Sanctions, including, without limitation, the Crimea Region of Ukraine, the so-called Donetsk People's Republic and Luhansk People's Republic regions of Ukraine, Cuba, Iran, North Korea and Syria (each, a "Sanctioned Country"); and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other person or entity (i) to fund or facilitate any unlawful activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any unlawful activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. Since incorporation, the Company has not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any Sanctioned Country or with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions in violation of Sanctions.

(qq) *No Broker's Fees.* The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against any of them or any Underwriter for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Shares.

(rr) *No Registration Rights*. Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, no person has the right to require the Company to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Shares.

(ss) *No Stabilization.* Neither the Company nor any of its affiliates has taken, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(tt) *Margin Rules*. Neither the issuance, sale and delivery of the Shares nor the application of the proceeds thereof by the Company as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(uu) *Forward-Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) included in any of the Registration Statement, the Pricing Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(vv) *Statistical and Market Data.* Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

(ww) *Sarbanes-Oxley Act*. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply with any applicable provision of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act"), including Section 402 related to loans and Sections 302 and 906 related to certifications.

(xx) *Status under the Securities Act*. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or any offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Shares and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405 under the Securities Act. The Company has paid the registration fee for this offering pursuant to Rule 456(b)(1) under the Securities Act or will pay such fee within the time period required by such rule (without giving effect to the proviso therein) and in any event prior to the Closing Date.

(yy) *No Ratings*. There are (and prior to the Closing Date, will be) no debt securities, convertible securities or preferred stock issued or guaranteed by the Company that are rated by a "nationally recognized statistical rating organization", as such term is defined in Section 3(a)(62) under the Exchange Act.

(zz) The Company has no subsidiaries (as defined in Rule 405 under the Securities Act).

4. Further Agreements of the Company. The Company covenants and agrees with each Underwriter that:

(a) *Required Filings.* The Company will file the final Prospectus with the Commission prior to the time of the Closing Date and in any event within the time periods specified by Rule 424(b) and Rule 430A, 430B or 430C under the Securities Act, will file any Issuer Free Writing Prospectus to the extent required by Rule 433 under the Securities Act; and the Company will furnish copies of the Prospectus and each Issuer Free Writing Prospectus (to the extent not previously delivered) to the Underwriters in New York City prior to 10:00 A.M., New York City time, on the business day next succeeding the date of this Agreement in such quantities as the Representatives may reasonably request.

(b) *Delivery of Copies.* The Company will deliver, without charge, (i) to the Representatives, two signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith; and (ii) to each Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and each Issuer Free Writing Prospectus) as the Representatives may reasonably request. As used herein, the term "Prospectus Delivery Period" means such period of time after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters a prospectus relating to the Shares is required by law to be delivered (or required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Shares by any Underwriter or dealer.

(c) *Amendments or Supplements, Issuer Free Writing Prospectuses.* Before making, preparing, using, authorizing, approving, referring to or filing any Issuer Free Writing Prospectus, and before filing any amendment or supplement to the Registration Statement, the Pricing Disclosure Package or the Prospectus, the Company will furnish to the Representatives and counsel for the Underwriters a copy of the proposed Issuer Free Writing Prospectus, amendment or supplement for review and will not make, prepare, use, authorize, approve, refer to or file any such Issuer Free Writing Prospectus or file any such proposed amendment or supplement to which the Representatives reasonably object.

(d) *Notice to the Representatives.* The Company will advise the Representatives promptly, and confirm such advice in writing (which may be by email), (i) when the Registration Statement has become effective; (ii) when any amendment to the Registration Statement has been filed or becomes effective; (iii) when any supplement to the Pricing Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication or any amendment to the Prospectus has been filed or distributed; (iv) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information including, but not limited to, any request for information concerning any Testing-the-Waters Communication; (v) of the issuance by the Commission or any other governmental or regulatory authority of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of any Preliminary Prospectus, any of the Pricing Disclosure Package, the Prospectus or any Written Testing-the-Waters Communication or the initiation or, to the knowledge of the Company, threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (vi) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, any of the Pricing Disclosure Package, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus, the Pricing Disclosure Package, any such Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication is delivered to a purchaser, not misleading; and (vii) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Shares for offer and sale

in any jurisdiction or the initiation or, to the knowledge of the Company, threatening of any proceeding for such purpose; and the Company will use its reasonable best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of any Preliminary Prospectus, any of the Pricing Disclosure Package or the Prospectus or any Written Testing-the-Waters Communication or suspending any such qualification of the Shares and, if any such order is issued, will obtain as soon as possible the withdrawal thereof.

(e) *Ongoing Compliance.* (1) If during the Prospectus Delivery Period (i) any event or development shall occur or condition shall exist as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Prospectus to comply with law, the Company will, as soon as practicable, notify the Underwriters thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission and furnish to the Underwriters and to such dealers as the Representatives may designate such amendments or supplements to the Prospectus as may be necessary so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law and (2) if at any time prior to the Closing Date (i) any event or development shall occur or condition shall exist as a result of which the Pricing Disclosure Package as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Pricing Disclosure Package is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Pricing Disclosure Package to comply with law, the Company will immediately notify the Underwriters thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission (to the extent required) and furnish to the Underwriters and to such dealers as the Representatives may designate such amendments or supplements to the Pricing Disclosure Package as may be necessary so that the statements in the Pricing Disclosure Package as so amended or supplemented will not, in the light of the circumstances existing when the Pricing Disclosure Package is delivered to a purchaser, be misleading or so that the Pricing Disclosure Package will comply with law.

(f) *Blue Sky Compliance.* The Company will use commercially reasonable efforts with the Underwriters' cooperation, if necessary, to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Representatives shall reasonably request and will use commercially reasonable efforts with the Underwriters' cooperation, if necessary, to continue such qualifications in effect so long as required for distribution of the Shares; provided that the Company shall not be required to (i) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (ii) file any general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject.

(g) *Earning Statement.* The Company will make generally available to its security holders and the Representatives as soon as practicable an earning statement that satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the "effective date" (as defined in Rule 158) of the Registration Statement; provided that the Company will be deemed to have furnished such statements to its security holders and the Representatives to the extent such earnings statement is made available on the Commission's Electronic Data Gathering, Analysis and Retrieval System ("EDGAR").

(h) *Clear Market.* For a period of 180 days after the date of the Prospectus (the "Restricted Period"), the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the Commission a registration statement under the Securities Act relating to, any shares of Stock or any securities convertible into or exercisable or exchangeable for Stock, or (ii) enter into any swap, hedging or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, or publicly disclose the intention to undertake any of the foregoing in clause (i) or (ii), whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise, without the prior written consent of JPM, other than the Shares to be sold hereunder.

The restrictions described above do not apply to (i) the issuance of shares of Stock or securities convertible into or exercisable for shares of Stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options (including net exercise) or the settlement of RSUs (including net settlement), in each case outstanding on the date of this Agreement and described in the Prospectus; (ii) grants of stock options, stock awards, restricted stock, RSUs, or other equity awards and the issuance of shares of Stock or securities convertible into or exercisable or exchangeable for shares of Stock (whether upon the exercise of stock options or otherwise) to the Company's employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the Closing Date and described in the Prospectus, provided that such recipients enter into a lock-up agreement with the Underwriters; (iii) the issuance of up to 7.5% of the outstanding shares of Stock, or securities convertible into, exercisable for, or which are otherwise exchangeable for, Stock, or the entrance into an agreement to issue Stock or any securities convertible into, exercisable for, or which are otherwise exchangeable for, Stock, immediately following the Closing Date, in connection with any bona fide licensing, commercialization, joint ventures, technology transfer, acquisitions, development collaboration or other similar strategic transactions, provided that such recipients enter into a lock-up agreement with the Underwriters; or (iv) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of this Agreement and described in the Prospectus or any assumed benefit plan pursuant to an acquisition or similar strategic transaction.

If JPM, in its sole discretion, agrees to release or waive the restrictions set forth in a lock-up agreement described in Section 6(l) hereof for an officer or director of the Company and provide the Company with notice of the impending release or waiver substantially in the form of Exhibit B hereto at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver substantially in the form of Exhibit C hereto through a major news service at least two business days before the effective date of the release or waiver.

(i) *Use of Proceeds.* The Company will apply the net proceeds from the sale of the Shares as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading "Use of proceeds".

(j) *No Stabilization.* Neither the Company nor its affiliates will take, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Stock.

(k) *Exchange Listing.* The Company will use its reasonable best efforts to list, subject to notice of issuance, the Shares on the Nasdaq Market.

(l) *Reports.* For a period of three years from the date of this Agreement, the Company will furnish to the Representatives, as soon as they are available, copies of all reports or other communications (financial or other) furnished to holders of the Shares, and copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange or automatic quotation system; provided the Company will be deemed to have furnished such reports and financial statements to the Representatives to the extent they are filed on EDGAR.

(m) *Record Retention*. The Company will, pursuant to reasonable procedures developed in good faith, retain copies of each Issuer Free Writing Prospectus that is not filed with the Commission in accordance with Rule 433 under the Securities Act.

(n) *Filings.* The Company will file with the Commission such reports as may be required by Rule 463 under the Securities Act.

(o) *Emerging Growth Company*. The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of Shares within the meaning of the Securities Act and (ii) completion of the Restricted Period.

(p) *Transfer Restrictions*. Until the expiration of the Lock-Up Period, the Company will (A) enforce all existing agreements between the Company and any of its security holders that prohibit the sale, transfer, assignment, pledge or hypothecation of any of the Company's securities; (B) direct the transfer agent and/or equity plan administrator to place stop transfer restrictions upon any such securities of the Company that are bound by such existing "lock-up," "market stand-off," "holdback," or similar provisions of such agreements for the duration of the Lock-Up Period; and (C) not release or otherwise grant any waiver of such provisions in such agreements without the prior written consent of the Representatives.

5. Certain Agreements of the Underwriters. Each Underwriter hereby represents and agrees that:

(a) It has not and will not use, authorize use of, refer to or participate in the planning for use of, any "free writing prospectus", as defined in Rule 405 under the Securities Act (which term includes use of any written information furnished to the Commission by the Company and not incorporated by reference into the Registration Statement and any press release issued by the Company) other than (i) a free writing prospectus that contains no "issuer information" (as defined in Rule 433(h)(2) under the Securities Act) that was not included (including through incorporation by reference) in the Preliminary Prospectus or a previously filed Issuer Free Writing Prospectus, (ii) any Issuer Free Writing Prospectus listed on Annex A or prepared pursuant to Section 3(c) or Section 4(c) above (including any electronic road show), or (iii) any free writing prospectus prepared by such underwriter and approved by the Company in advance in writing (each such free writing prospectus referred to in clauses (i) or (iii), an "Underwriter Free Writing Prospectus").

(b) It has not and will not, without the prior written consent of the Company, use any free writing prospectus that contains the final terms of the Shares unless such terms have previously been included in a free writing prospectus filed with the Commission; provided that Underwriters may use a term sheet substantially in the form of Annex C hereto without the consent of the Company; provided further that any Underwriter using such term sheet shall notify the Company, and provide a copy of such term sheet to the Company, prior to, or substantially concurrently with, the first use of such term sheet.

(c) It is not subject to any pending proceeding under Section 8A of the Securities Act with respect to the offering (and will promptly notify the Company if any such proceeding against it is initiated during the Prospectus Delivery Period).

6. Conditions of Underwriters' Obligations. The obligation of each Underwriter to purchase the Underwritten Shares on the Closing Date or the Option Shares on the Additional Closing Date, as the case may be, as provided herein is subject to the performance by the Company of its covenants and other obligations hereunder and to the following additional conditions:

(a) *Registration Compliance; No Stop Order*. No order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission; the Prospectus and each Issuer Free Writing Prospectus shall have been timely filed with the Commission under the Securities Act (in the case of an Issuer Free Writing Prospectus, to the extent required by Rule 433 under the Securities Act) and in accordance with Section 4(a) hereof; and all requests by the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representatives.

(b) *Representations and Warranties.* The representations and warranties of the Company contained herein shall be true and correct on the date hereof and on and as of the Closing Date or the Additional Closing Date, as the case may be; and the statements of the Company and its officers made in any certificates delivered pursuant to this Agreement shall be true and correct on and as of the Closing Date or the Additional Closing Date, as the case may be.

(c) *No Material Adverse Change.* No event or condition of a type described in Section 3(h) hereof shall have occurred or shall exist, which event or condition is not described in the Pricing Disclosure Package (excluding any amendment or supplement thereto) and the Prospectus (excluding any amendment or supplement thereto) and the effect of which in the judgment of the Representatives makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated by this Agreement, the Pricing Disclosure Package and the Prospectus.

(d) *Officer's Certificate.* The Representatives shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, a certificate of the chief financial officer or chief accounting officer of the Company and one additional senior executive officer of the Company who is satisfactory to the Representatives (i) confirming that such officers have carefully reviewed the Registration Statement, the Pricing Disclosure Package and the Prospectus and, to the knowledge of such officers, the representations set forth in Sections 3(b) and 3(f) hereof are true and correct, (ii) confirming that the other representations and warranties of the Company in this Agreement are true and correct and that the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date or the Additional Closing Date, as the case may be, and (iii) to the effect set forth in paragraphs (a), (b) and (c) above.

(e) *Comfort Letters.* (i) On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, Ernst & Young LLP shall have furnished to the Representatives, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus; provided, that the letter delivered on the Closing Date or the Additional Closing Date, as the case may be, shall use a "cut-off" date no more than three business days prior to such Closing Date or such Additional Closing Date, as the case may be.

(ii) On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, the Company shall have furnished to the Representatives a certificate, dated the respective dates of delivery thereof and addressed to the Underwriters, of its chief financial officer with respect to certain financial data contained in the Pricing Disclosure Package and the Prospectus, providing "management comfort" with respect to such information, in form and substance reasonably satisfactory to the Representatives.

(f) *Opinion and 10b-5 Statement of Counsel for the Company.* Goodwin Procter LLP, counsel for the Company, shall have furnished to the Representatives, at the request of the Company, their written opinion and 10b-5 statement, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(g) *Opinion of Intellectual Property Counsel for the Company*. Foley Hoag LLP, intellectual property counsel for the Company, shall have furnished to the Representatives, at the request of the Company, their written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(h) *Opinion and 10b-5 Statement of Counsel for the Underwriters.* The Representatives shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, an opinion and 10b-5 statement, addressed to the Underwriters, of Cooley LLP, counsel for the Underwriters, with respect to such matters as the Representatives may reasonably request, and such counsel shall have received such documents and information as they may reasonably request to enable them to pass upon such matters.

(i) *No Legal Impediment to Issuance and Sale.* No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date or the Additional Closing Date, as the case may be, prevent the issuance or sale of the Shares; and no injunction or order of any federal, state or foreign court shall have been issued that would, as of the Closing Date or the Additional Closing Date, as the case may be, prevent the issuance or sale of the Shares.

(j) *Good Standing*. The Representatives shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, satisfactory evidence of the good standing of the Company in its jurisdiction of organization and its good standing in such other jurisdictions as the Representatives may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.

(k) *Exchange Listing.* The Shares to be delivered on the Closing Date or the Additional Closing Date, as the case may be, shall have been approved for listing on the Nasdaq Market, subject to official notice of issuance.

(l) *Lock-up Agreements*. The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between the Representatives and the officers, directors and substantially all of the securityholders of the Company, relating to sales and certain other dispositions of shares of Stock or certain other securities, delivered to you on or before the date hereof, shall be full force and effect on the Closing Date or the Additional Closing Date, as the case may be.

(m) *Additional Documents.* On or prior to the Closing Date or the Additional Closing Date, as the case may be, the Company shall have furnished to the Representatives such further certificates and documents as the Representatives may reasonably request.

All opinions, letters, certificates and evidence mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriters.

7. Indemnification and Contribution.

(a) *Indemnification of the Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, reasonable and documented legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), joint or several, that arise out of, or are based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or any amendment or supplement thereto), any Preliminary Prospectus, any Issuer Free Writing Prospectus, any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Securities Act, any Written Testing-the-Waters Communication, any road show as defined in Rule 433(h) under the Securities Act (a "road show") or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), or caused by any omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in paragraph (b) below.

(b) *Indemnification of the Company.* Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the indemnity set forth in paragraph (a) above, but only with respect to any losses, claims, damages or liabilities that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to such Underwriter furnished to the Company in writing by such Underwriter through

the Representatives expressly for use in the Registration Statement, the Prospectus (or any amendment or supplement thereto), any Preliminary Prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, any road show or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession and reallowance figures appearing in the third paragraph under the caption "Underwriting" and the information contained in the sixteenth and seventeenth paragraphs under the caption "Underwriting."

(c) *Notice and Procedures.* If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnification may be sought pursuant to the preceding paragraphs of this Section 7, such person (the "Indemnified Person") shall promptly notify the person against whom such indemnification may be sought (the "Indemnifying Person") in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under the preceding paragraphs of this Section 7 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided, further, that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have to an Indemnified Person otherwise than under the preceding paragraphs of this Section 7. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person (who shall not, without the consent of the Indemnified Person, be counsel to the Indemnifying Person) to represent the Indemnified Person and any others entitled to indemnification pursuant to this Section 7 that the Indemnifying Person may designate in such proceeding and shall pay reasonable and documented fees and expenses in such proceeding and shall pay the reasonable and documented fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such fees and expenses shall be paid or reimbursed as they are incurred. Any such separate firm for any Underwriter, its affiliates, directors and officers and any control persons of such Underwriter shall be designated in writing by the Representatives and any such separate firm for the Company, its directors, its officers who signed the Registration Statement and any control persons of the Company shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written

consent, but if settled with such consent, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested that an Indemnifying Person reimburse the Indemnified Person for fees and expenses of counsel as contemplated by this paragraph, the Indemnifying Person shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by the Indemnifying Person of such request and (ii) the Indemnifying Person shall not have reimbursed the Indemnified Person in accordance with such request prior to the date of such settlement. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification could have been sought hereunder by such Indemnified Person, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

(d) *Contribution.* If the indemnification provided for in paragraphs (a) or (b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters on the other, from the offering of the Shares or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company, on the one hand, and the Underwriters on the other, in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters on the other, shall be deemed to be in the same respective proportions as the net proceeds (before deducting expenses) received by the Company from the sale of the Shares and the total underwriting discounts and commissions received by the Underwriters in connection therewith, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate offering price of the Shares. The relative fault of the Company, on the one hand, and the Underwriters on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) *Limitation on Liability.* The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to paragraph (d) above were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in paragraph (d) above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in paragraph (d) above shall be deemed to include, subject to the limitations set forth above, any reasonable and documented legal or other

expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of paragraphs (d) and (e), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Shares exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to paragraphs (d) and (e) are several in proportion to their respective purchase obligations hereunder and not joint.

(f) *Non-Exclusive Remedies.* The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

8. Effectiveness of Agreement. This Agreement shall become effective as of the date first written above.

9. Termination. This Agreement may be terminated in the absolute discretion of the Representatives, by notice to the Company, if after the execution and delivery of this Agreement and on or prior to the Closing Date or, in the case of the Option Shares, prior to the Additional Closing Date, (i) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange or The Nasdaq Stock Market; (ii) trading of any securities issued or guaranteed by the Company shall have been suspended on any exchange or in any over-the-counter market; (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; or (iv) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis, either within or outside the United States, that, in the judgment of the Representatives, is material and adverse and makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated by this Agreement, the Pricing Disclosure Package and the Prospectus.

10. Defaulting Underwriter.

(a) If, on the Closing Date or the Additional Closing Date, as the case may be, any Underwriter defaults on its obligation to purchase the Shares that it has agreed to purchase hereunder on such date, the non-defaulting Underwriters may in their discretion arrange for the purchase of such Shares by other persons satisfactory to the Company on the terms contained in this Agreement. If, within 36 hours after any such default by any Underwriter, the non-defaulting Underwriters do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of 36 hours within which to procure other persons satisfactory to the non-defaulting Underwriters to purchase such Shares on such terms. If other persons become obligated or agree to purchase the Shares of a defaulting Underwriter, either the non-defaulting Underwriters or the Company may postpone the Closing Date or the Additional Closing Date, as the case may be, for up to five full business days in order to effect any changes that in the

opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement and the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement and the Prospectus that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context otherwise requires, any person not listed in Schedule 1 hereto that, pursuant to this Section 10, purchases Shares that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Shares that remain unpurchased on the Closing Date or the Additional Closing Date, as the case may be, does not exceed one-eleventh of the aggregate number of Shares to be purchased on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Shares that such Underwriter agreed to purchase hereunder on such date plus such Underwriter's pro rata share (based on the number of Shares that such Underwriter agreed to purchase on such date) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made.

(c) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Shares that remain unpurchased on the Closing Date or the Additional Closing Date, as the case may be, exceeds one-eleventh of the aggregate amount of Shares to be purchased on such date, or if the Company shall not exercise the right described in paragraph (b) above, then this Agreement or, with respect to any Additional Closing Date, the obligation of the Underwriters to purchase Shares on the Additional Closing Date, as the case may be, shall terminate without liability on the part of the non-defaulting Underwriters. Any termination of this Agreement pursuant to this Section 10 shall be without liability on the part of the Company, except that the Company will continue to be liable for the payment of expenses as set forth in Section 11 hereof and except that the provisions of Section 7 hereof shall not terminate and shall remain in effect.

(d) Nothing contained herein shall relieve a defaulting Underwriter of any liability it may have to the Company or any non-defaulting Underwriter for damages caused by its default.

11. Payment of Expenses.

(a) Whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, the Company will pay or cause to be paid all costs and expenses incident to the performance of its obligations hereunder, including without limitation, (i) the costs incident to the authorization, issuance, sale, preparation and delivery of the Shares and any taxes payable in that connection; (ii) the costs incident to the preparation, printing and filing under the Securities Act of the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus, any Pricing Disclosure Package and the Prospectus (including all exhibits, amendments and supplements thereto) and the distribution thereof; (iii) the fees and expenses of the Company's counsel and independent accountants; (iv) the fees and expenses incurred in connection with the registration or qualification and determination of eligibility for

investment of the Shares under the laws of such jurisdictions as the Representatives may designate and the preparation, printing and distribution of a Blue Sky Memorandum (including the related reasonable and documented fees and expenses of counsel for the Underwriters); (v) the cost of preparing stock certificates; (vi) the costs and charges of any transfer agent and any registrar; (vii) all expenses and application fees incurred in connection with any filing with, and clearance of the offering by, FINRA (in an amount not to exceed, when taken together with costs, fees and expenses incurred pursuant to clause (iv), $40,000 (exclusive of filing fees) without the prior written consent of the Company); (viii) all reasonable and documented expenses incurred by the Company in connection with any "road show" presentation to potential investors, provided, however, that the Company and the Underwriters shall each pay 50% of the total costs of chartering any aircraft to be used in connection with any such "road shows"; and (ix) all expenses and application fees related to the listing of the Shares on the Nasdaq Market.

(b) If (i) this Agreement is terminated pursuant to Section 9, (ii) the Company for any reason fails to tender the Shares for delivery to the Underwriters or (iii) the Underwriters decline to purchase the Shares for any reason permitted under this Agreement, the Company agrees to reimburse the Underwriters for all reasonable and documented out-of-pocket costs and expenses (including the reasonable and documented fees and expenses of their counsel) incurred by the Underwriters in connection with this Agreement and the offering contemplated hereby. For the avoidance of doubt, the Company will not be required to pay or reimburse any costs, fees or expenses incurred by any Underwriter that defaults on its obligations to purchase the Shares, as described in Section 10 hereof.

12. Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and any controlling persons referred to herein, and the affiliates of each Underwriter referred to in Section 7 hereof. Nothing in this Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein. No purchaser of Shares from any Underwriter shall be deemed to be a successor merely by reason of such purchase.

13. Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company and the Underwriters contained in this Agreement or made by or on behalf of the Company or the Underwriters pursuant to this Agreement or any certificate delivered pursuant hereto shall survive the delivery of and payment for the Shares and shall remain in full force and effect, regardless of any termination of this Agreement or any investigation made by or on behalf of the Company or the Underwriters or the directors, officers, controlling persons or affiliates referred to in Section 7 hereof.

14. Certain Defined Terms. For purposes of this Agreement, (a) except where otherwise expressly provided, the term "affiliate" has the meaning set forth in Rule 405 under the Securities Act; and (b) the term "business day" means any day other than a day on which banks are permitted or required to be closed in New York City.

15. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

16. Miscellaneous.

(a) *Notices.* All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted and confirmed by any standard form of telecommunication. Notices to the Underwriters shall be given to the Representatives c/o J.P. Morgan Securities LLC, 383 Madison Avenue, New York, New York 10179 (fax: (212) 622-8358), Attention: Equity Syndicate Desk; c/o TD Securities (USA) LLC, Attention: Head of Equity Capital Markets, Fax: 646-562-1249 with a copy to the General Counsel, Fax: 646-562-1130; c/o Cantor Fitzgerald & Co., 110 East 59th Street, New York, New York, 10022, Attention: General Counsel; and Wells Fargo Securities, LLC, 500 West 33rd Street, New York, New York 10001, Attention: Equity Syndicate Department (fax no: (212) 214-5918). Notices to the Company shall be given to it at Septerna, Inc., 250 East Grand Avenue, South San Francisco, California 94080; Attention: Chief Executive Officer.

(b) *Governing Law.* This Agreement and any claim, controversy or dispute arising under or related to this Agreement shall be governed by and construed in accordance with the laws of the State of New York.

(c) *Submission to Jurisdiction*. The Company hereby submits to the exclusive jurisdiction of the U.S. federal and New York state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company waives any objection which it may now or hereafter have to the laying of venue of any such suit or proceeding in such courts. The Company agrees that final judgment in any such suit, action or proceeding brought in such court shall be conclusive and binding upon the Company and may be enforced in any court to the jurisdiction of which Company is subject by a suit upon such judgment.

(d) *Waiver of Jury Trial.* Each of the parties hereto hereby waives any right to trial by jury in any suit or proceeding arising out of or relating to this Agreement.

(e) *Recognition of the U.S. Special Resolution Regimes*.

(i) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(ii) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

As used in this Section 16(e):

"BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

"Covered Entity" means any of the following:

(i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

(f) *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument. The words "execution," "signed," "signature," and words of like import in this Agreement or in any other certificate, agreement or document related to this Agreement, if any, shall include images of manually executed signatures transmitted by facsimile or other electronic format (including, without limitation, "pdf," "tif" or "jpg") and other electronic signatures (including, without limitation, DocuSign and AdobeSign). The use of electronic signatures and electronic records (including, without limitation, any contract or other record created, generated, sent, communicated, received, or stored by electronic means) shall be of the same legal effect, validity and enforceability as a manually executed signature or use of a paper-based record-keeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act and any other applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act or the Uniform Commercial Code.

(g) *Amendments or Waivers.* No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.

(h) *Headings.* The headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

[Signature Pages Follow]

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

SEPTERNA, INC.

By: _____
Name: Jeffrey Finer, M.D., Ph.D.
Title: Chief Executive Officer

Accepted: As of the date first written above

J.P. MORGAN SECURITIES LLC
TD SECURITIES (USA) LLC
CANTOR FITZGERALD & CO.
WELLS FARGO SECURITIES, LLC

For themselves and on behalf of the
several Underwriters listed
in Schedule 1 hereto.

J.P. MORGAN SECURITIES LLC

By: _____
Authorized Signatory

TD SECURITIES (USA) LLC

By: _____
Authorized Signatory

CANTOR FITZGERALD & CO.

By: _____
Authorized Signatory

WELLS FARGO SECURITIES, LLC

By: _____
Authorized Signatory

Schedule 1

Underwriter	Number of Shares
J.P. Morgan Securities LLC	[•]
TD Securities (USA) LLC	[•]
Cantor Fitzgerald & Co.	[•]
Wells Fargo Securities, LLC	[•]
Total	[•]

a. **Pricing Disclosure Package**

[None.]

b. **Pricing Information**

Number of Underwritten Shares: [•]

Number of Option Shares: [•]

Public Offering Price: $[•] per Share

Written Testing-the-Waters Communications

Testing-the-Waters Investor Presentation, dated August 2024

Testing-the-Waters Investor Presentation, dated August 2024

Testing-the-Waters Investor Presentation, dated September 2024

Annex B

Septerna, Inc.

Pricing Term Sheet

[None.]

Form of Lock-Up Agreement

_____, 2024

J.P. MORGAN SECURITIES LLC
TD SECURITIES (USA) LLC
CANTOR FITZGERALD & CO.
WELLS FARGO SECURITIES, LLC

As Representatives of
the several Underwriters listed in
Schedule 1 to the Underwriting
Agreement referred to below

c/o J.P. Morgan Securities LLC
383 Madison Avenue
New York, New York 10179

c/o TD Securities (USA) LLC
1 Vanderbilt Avenue
New York, New York 10017

c/o Cantor Fitzgerald & Co.
110 East 59th Street
New York, New York 10022

c/o Wells Fargo Securities, LLC
500 West 33rd Street, 14th Floor
New York, New York 10001

Re: Septerna, Inc. — Initial Public Offering

Ladies and Gentlemen:

The undersigned understands that you, as Representatives of the several Underwriters, propose to enter into an underwriting agreement (the "Underwriting Agreement") with Septerna, Inc., a Delaware corporation (the "Company"), providing for the initial public offering (the "Public Offering") by the several Underwriters named in Schedule 1 to the Underwriting Agreement (the "Underwriters"), of common stock, par value $0.001 per share (the "Common Stock"), of the Company (the "Securities"). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriters' agreement to purchase and make the Public Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of J.P. Morgan Securities LLC on behalf of the Underwriters, the undersigned will not, and will not cause

any direct or indirect affiliate to, during the period beginning on the date of this letter agreement (this "Letter Agreement") and ending at the close of business 180 days after the date of the final prospectus relating to the Public Offering (the "Prospectus") (such period, the "Restricted Period"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (including without limitation, Common Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant) (collectively with the Common Stock, the "Lock-Up Securities"), (2) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the Lock-Up Securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Lock-Up Securities, in cash or otherwise, (3) make any demand for or exercise any right with respect to the registration of any Lock-Up Securities, or (4) publicly disclose the intention to do any of the foregoing. The undersigned acknowledges and agrees that the foregoing precludes the undersigned from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (whether by the undersigned or any other person) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any Lock-Up Securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of Lock-Up Securities, in cash or otherwise. The undersigned further confirms that it has furnished the Representatives with the details of any transaction the undersigned, or any of its affiliates, is a party to as of the date hereof, which transaction would have been restricted by this Letter Agreement if it had been entered into by the undersigned during the Restricted Period.

Notwithstanding the foregoing, the undersigned may:

(a) transfer or dispose of the undersigned's Lock-Up Securities:

(i) as a bona fide gift or gifts or charitable contribution, or for bona fide estate planning purposes,

(ii) by will or intestacy or any other testamentary document,

(iii) to any member of the undersigned's immediate family or to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, or if the undersigned is a trust, to a trustor, trustee or beneficiary of the trust or to the estate of a trustor, trustee or beneficiary of such trust (for purposes of this Letter Agreement, "immediate family" shall mean any relationship by blood, current or former marriage, domestic partnership or adoption, not more remote than first cousin),

(iv) to a corporation, partnership, limited liability company, investment fund, or other entity (A) of which the undersigned and the immediate family of the undersigned are the legal and beneficial owner of all of the outstanding equity securities or similar interests, or (B) controlled by, or under common control with, the undersigned or the immediate family of the undersigned,

(v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv) above,

(vi) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the undersigned, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control or common investment management with the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), or (B) as part of a distribution to limited partners, members or shareholders of the undersigned,

(vii) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree, separation agreement or any other court order,

(viii) to the Company upon death or disability of the undersigned, or, if the undersigned is an employee of the Company, upon death, disability or termination of employment, in each case, of such employee,

(ix) as part of a sale of the undersigned's Lock-Up Securities acquired (A) from the Underwriters in the Public Offering or (B) in open market transactions after the closing date for the Public Offering,

(x) to the Company in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of Common Stock (including, in each case, by way of "net" or "cashless" exercise), including for the payment of exercise price and tax and remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, provided that any such shares of Common Stock received upon such exercise, vesting or settlement shall be subject to the terms of this Letter Agreement, and provided further that any such restricted stock units, options, warrants or rights are held by the undersigned pursuant to an agreement or equity awards granted under a stock incentive plan or other equity award plan, each such agreement or plan which is described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, or

(xi) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the Board of Directors of the Company and made to all holders of the Company's capital stock involving a Change of Control (as defined below) of the Company (for purposes hereof, "Change of Control" shall mean the

transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons, of shares of capital stock if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity)); provided that in the event that such tender offer, merger, consolidation or other similar transaction is not completed, the undersigned's Lock-Up Securities shall remain subject to the provisions of this Letter Agreement;

provided that (A) in the case of any transfer or distribution pursuant to clause (a)(i), (ii), (iii), (iv), (v), (vi) and (vii), such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the Representatives a lock-up letter in the form of this Letter Agreement, (B) in the case of any transfer or distribution pursuant to clause (a) (iii), (iv), (v), (vi), (ix) and (x), no filing by any party (donor, donee, devisee, transferor, transferee, distributer or distributee) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 or a filing required pursuant to Section 13 of the Exchange Act and the rules and regulations promulgated thereunder made after the expiration of the Restricted Period referred to above) and (C) in the case of any transfer or distribution pursuant to clause (a) (i), (ii), (vii) and (viii) it shall be a condition to such transfer that no public filing, report or announcement shall be voluntarily made and if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of Common Stock in connection with such transfer or distribution shall be legally required during the Restricted Period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer;

(b) exercise outstanding options, settle restricted stock units or other equity awards or exercise warrants pursuant to plans described in the Registration Statement, the Pricing Disclosure Package and the Prospectus; provided that any Lock-Up Securities received upon such exercise, vesting or settlement shall be subject to the terms of this Letter Agreement;

(c) convert outstanding preferred stock, warrants to acquire preferred stock or convertible securities into shares of Common Stock or warrants to acquire shares of Common Stock; provided that any such shares of Common Stock or warrants received upon such conversion shall be subject to the terms of this Letter Agreement; and

(d) establish or amend trading plans pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Lock-Up Securities; provided that (1) such plans do not provide for the transfer of Lock-Up Securities during the Restricted Period and (2) no filing by any party under the Exchange Act or other public announcement shall be made voluntarily in connection with the establishment or amendment of such trading plans pursuant to Rule 10b51, provided that if a filing under the Exchange Act or other public announcement is required, such announcement or filing shall include a statement to the effect that no transfer of Lock-Up Securities may be made under such trading plan pursuant to Rule 10b5-1 during the Restricted Period.

Exhibit A

If the undersigned is not a natural person, the undersigned represents and warrants that no single natural person, entity or "group" (within the meaning of Section 13(d)(3) of the Exchange Act) beneficially owns, directly or indirectly, 50% or more of the common equity interests, or 50% or more of the voting power, in the undersigned.

If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any Company-directed Securities the undersigned may purchase in the Public Offering.

If the undersigned is an officer or director of the Company, (i) J.P. Morgan Securities LLC on behalf of the Underwriters agrees that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of Lock-Up Securities, J.P. Morgan Securities LLC on behalf of the Underwriters will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by J.P. Morgan Securities LLC on behalf of the Underwriters hereunder to any such officer or director shall only be effective two business days after the publication date of such announcement. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration or that is to an immediate family member as defined in FINRA Rule 5130(i)(5) and (b) the transferee has agreed in writing to be bound by the same terms described in this Letter Agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the registration or transfer of the securities described herein, are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Letter Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Letter Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned. In the event that any signature is delivered by facsimile transmission, electronic mail or otherwise by electronic transmission evidencing an intent to sign this Letter Agreement, such facsimile transmission, electronic mail or other electronic transmission shall create a valid and binding obligation of the undersigned with the same force and effect as if such signature were an original. Execution and delivery of this Letter Agreement by facsimile transmission, electronic mail or other electronic transmission is legal, valid and binding for all purposes.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering of the Securities and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Representatives may be required or choose to provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Public Offering, the

Representatives and the other Underwriters are not making a recommendation to you to enter into this Letter Agreement, participate in the Public Offering, or sell any Securities at the price determined in the Public Offering, and nothing set forth in such disclosures is intended to suggest that the Representatives or any Underwriter is making such a recommendation.

The undersigned understands that this Letter Agreement and all related restrictions and obligations shall automatically terminate upon the earliest to occur, if any, of (a) the Representatives, on the one hand, or the Company, on the other hand, advising the other in writing prior to the execution of the Underwriting Agreement that the Representatives have or the Company has determined not to proceed with the Public Offering contemplated by the Underwriting Agreement, (b) March 31, 2025, if the Underwriting Agreement does not become effective by that date (provided, however, that the undersigned agrees that this Letter Agreement shall be automatically extended by three months if the Company provides written notice to the undersigned that the Company is still pursuing the Public Offering contemplated by the Underwriting Agreement), (c) the termination of the Underwriting Agreement (other than the provisions thereof which survive termination) prior to payment for and delivery of the Common Stock to be sold thereunder, or (d) the Registration Statement with respect to the Public Offering contemplated by the Underwriting Agreement is withdrawn prior to the execution of the Underwriting Agreement. The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Letter Agreement.

[Signature page follows]

Exhibit A

This Letter Agreement and any claim, controversy or dispute arising under or related to this Letter Agreement shall be governed by and construed in accordance with the laws of the State of New York.

Very truly yours,

_____

Name of Security Holder *(Print exact name)*

By: _____

Signature

If not signing in an individual capacity:

_____

Name of Authorized Signatory *(Print)*

_____

Title of Authorized Signatory *(Print)*

(indicate capacity of person signing if signing as custodian, trustee, or on behalf of an entity)

Exhibit A

Form of Waiver of Lock-up

J.P. MORGAN SECURITIES LLC

Septerna, Inc.
Public Offering of Common Stock

[Date]

[Name and Address of
Officer or Director
Requesting Waiver]

Dear Mr./Ms. [Name]:

This letter is being delivered to you in connection with the offering by Septerna, Inc. (the "Company") of shares of common stock, $0.001 par value per share (the "Common Stock"), of the Company and the lock-up letter dated [•], 2024 (the "Lock-up Letter"), executed by you in connection with such offering, and your request for a [waiver] [release] dated [•], 2024, with respect to shares of Common Stock (the "Shares"). J.P. Morgan Securities LLC hereby agrees to [waive] [release] the transfer restrictions set forth in the Lock-up Letter, but only with respect to the Shares, effective , 2024; provided, however, that such [waiver] [release] is conditioned on the Company announcing the impending [waiver] [release] by press release through a major news service at least two business days before effectiveness of such [waiver] [release]. This letter will serve as notice to the Company of the impending [waiver] [release].

Except as expressly [waived] [released] hereby, the Lock-up Letter shall remain in full force and effect.

[Signature Page Follows]

Yours very truly,

J.P. MORGAN SECURITIES LLC

By: _____
Authorized Signatory

cc: Septerna, Inc.

Exhibit B

Form of Press Release

Septerna, Inc.

[Date]

Septerna, Inc. (the "Company") announced today that J.P. Morgan Securities LLC, TD Securities (USA) LLC, Cantor Fitzgerald & Co. and Wells Fargo Securities, LLC, the book-running managers in the Company's recent public sale of shares of common stock, are [waiving] [releasing] a lock-up restriction with respect to shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on , 2024, and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

AUTHORIZATION LETTER

In reliance on Section 5(d) of and/or Rule 163B under the Securities Act of 1933, as amended (the "Act"), Septerna, Inc. (the "Issuer") hereby authorizes J.P. Morgan Securities LLC ("J.P. Morgan"), TD Securities (USA) LLC ("TD Cowen"), Cantor Fitzgerald & Co. ("Cantor") and Wells Fargo Securities, LLC ("Wells Fargo"), and their respective affiliates and their respective employees, to engage on behalf of the Issuer in oral and written communications with potential investors that are "qualified institutional buyers", as defined in Rule 144A under the Act, or institutions that are "accredited investors", within the meaning of Rule 501(a)(1), (a)(2), (a)(3), (a)(7), (a)(8), (a)(9), (a)(12) or (a)(13) under the Act, to determine whether such investors might have an interest in the Issuer's contemplated initial public offering ("Testing-the-Waters Communications").

A "Written Testing-the Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act, other than such Testing the Waters Communications that are purely logistical in nature or are limited to any one or more statements described in Rule 134 under the Act (whether or not reliance on Rule 134 would otherwise be permitted or available under the Act for such Testing the Waters Communication) and/or any customary legal or regulatory legends or disclaimers. Each of J.P. Morgan, TD Cowen, Cantor and Wells Fargo, individually and not jointly, agrees that it shall not distribute any Written Testing-the-Waters Communication that has not been approved by the Issuer.

The Issuer represents that it is an "emerging growth company" as defined in Section 2(a)(19) of the Act ("Emerging Growth Company") and agrees to promptly notify J.P. Morgan, TD Cowen, Cantor and Wells Fargo in writing if the Issuer hereafter ceases to be an Emerging Growth Company while this authorization is in effect. If at any time following the distribution of any Written Testing-the-Waters Communication there occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Issuer will promptly notify J.P. Morgan, TD Cowen, Cantor and Wells Fargo and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

Nothing in this authorization is intended to limit or otherwise affect the ability of J.P. Morgan, TD Cowen, Cantor and Wells Fargo, and their respective affiliates and their respective employees, to engage in communications in which they could otherwise lawfully engage in the absence of this authorization, including, without limitation, any written communication containing only one or more of the statements specified under Rule 134(a) under the Act. This authorization shall remain in effect until the Issuer has provided to J.P. Morgan, TD Cowen, Cantor and Wells Fargo a written notice revoking this authorization. All notices as described herein shall be sent by email to the attention of Pete Castoro, Mariel Healy, Jason Fenton and Ryan Haney.

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF SEPTERNA, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Septerna, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**").

DOES HEREBY CERTIFY:

1. That the name of this corporation is Septerna, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on December 5, 2019.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, as amended, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation, as amended, be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Septerna, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 260,590,689 shares of Common Stock, $0.001 par value per share ("**Common Stock**") and (ii) 196,657,452 shares of Preferred Stock, $0.001 par value per share ("**Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Corporation's Certificate of Incorporation (as amended and/or restated from time to time, the "**Certificate of Incorporation**") that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

Preferred Stock may be issued from time to time in one or more series, each of such series to consist of such number of shares and to have such terms, rights, powers and preferences, and the qualifications and limitations with respect thereto, as stated or expressed herein.

75,000,000 shares of the Preferred Stock of the Corporation are hereby designated "**Series A Preferred Stock**" and 121,657,452 shares of the Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**", each with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. The Series A Preferred Stock and the Series B Preferred Stock are referred to, collectively, as the "**Preferred Stock**". Unless otherwise indicated, references to "**Sections**" or "**Subsections**" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of such class or series of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The "**Series A Original Issue Price**" shall mean $1.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The "**Series B Original Issue Price**" shall mean $1.23297 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The "**Original Issue Price**" shall mean the Series A Original Issue Price, in the case of the Series A Preferred Stock, and the Series B Original Issue Price, in the case of the Series B Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event (as defined below), the holders of shares of Preferred Stock then outstanding shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Net Proceeds (as defined below), as applicable, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of such series of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up of the Corporation or Deemed Liquidation Event. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full. The amount which a holder of shares of Preferred Stock is entitled to receive under this Subsection 2.1 is hereinafter referred to as the "**Liquidation Amount**."

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment in full of all Liquidation Amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, the consideration not payable to the holders of shares of Preferred Stock pursuant to Section 2.1 or the remaining Net Proceeds, as the case may be, shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least a majority of the then outstanding shares of Preferred Stock, including at least one (1) holder that, together with its affiliates, holds only shares of Series B Preferred Stock and is a Major Investor (as defined in that certain Amended and Restated Investors' Rights Agreement, dated on or about the Original Issue Date, by and among the Corporation and the other parties listed therein as "Investors" (as the same may be amended, restated or otherwise modified from time to time in accordance with the terms thereof)), voting or consenting as a separate, exclusive class (the "**Required Vote**"), elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation; or

(c) any merger or consolidation in connection with a SPAC Transaction (as defined below) or Reverse Merger Transaction (as defined below)

"**SPAC Transaction**" is any business combination pursuant to which the Corporation is merged into, or otherwise combines with, a special purpose acquisition company (a "**SPAC**") listed on a "national securities exchange", or a subsidiary of such SPAC, and the shares of capital stock of the Corporation outstanding immediately prior to such transaction continue to represent, or are converted into or exchanged for shares of capital stock (or securities convertible into or exchangeable for shares of capital stock) that represent, immediately following such combination, a majority, by voting power, of the capital stock of (A) the surviving or resulting corporation; or (B) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such combination or consolidation, the parent corporation of such surviving or resulting corporation; provided that the cash resources of the SPAC, excluding the cash resources of the Corporation, but inclusive of amounts released from the SPAC's associated trust fund and other proceeds to the SPAC from contemporaneous sales of securities upon the consummation of the SPAC's business combination with the Corporation, exceeds $10,000,000.

"**Reverse Merger Transaction**" is any business combination pursuant to which the Corporation is merged into, or otherwise combines with, a public company (a "**Pubco**") listed on a "national securities exchange", or a subsidiary of such Pubco, and the shares of capital stock of the Corporation outstanding immediately prior to such transaction continue to represent, or are converted into or exchanged for shares of capital stock (or securities convertible into or exchangeable for shares of capital stock) that represent, immediately following such combination, a majority, by voting power, of the capital stock of (A) the surviving or resulting corporation; or (B) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such combination or consolidation, the parent corporation of such surviving or resulting corporation, provided that the cash resources of the Pubco, excluding the cash resources of the Corporation, but inclusive of proceeds to the Pubco or the Corporation from contemporaneous sales of securities upon the consummation of the Reverse Merger Transaction, exceeds $10,000,000.

2.3.2 Effecting a Deemed Liquidation Event; Redemption.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) above unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation in such Deemed Liquidation Event shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 above.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii), or 2.3.1(b) above, if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth (90th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders representing the Required Vote request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation (the "**Board of Directors**") (together with any other assets of the Corporation available for distribution to its stockholders as determined in good faith by the Board of Directors, the "**Net Proceeds**")), all to the extent permitted by Delaware law governing distributions to stockholders, on the one hundred fiftieth (150th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the Liquidation Amount (the "**Redemption Date**"). Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Net Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, or if the Corporation does not have sufficient lawfully available funds to effect such redemption, the Corporation shall ratably redeem each holder's shares of Preferred Stock (in proportion to such holder's respective Liquidation Amount) to the fullest extent of such Net Proceeds or such lawfully available funds, as the case may be, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. The provisions of Subsections 2.3.2(c)(i) through 2.3.2(c)(iii) below shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Preferred Stock pursuant to this Subsection 2.3.2(b). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

(c) In connection with this Section 2.3.2 only, the holders of the Preferred Stock shall have redemption rights as follows:

(i) If on the Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Preferred Stock to be redeemed, the Corporation shall ratably (in proportion to each holder's respective Liquidation Amount) redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law.

(ii) If on the applicable Redemption Date the redemption price payable upon redemption of the shares of Preferred Stock to be redeemed on such Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor, then notwithstanding that the certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the redemption price without interest upon surrender of their certificate or certificates therefor.

(iii) Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

2.3.3 Amount Deemed Paid or Distributed. If the amount deemed paid or distributed under this Subsection 2.3 is made in property other than in cash, the value of such payment or distribution shall be the fair market value of such property, determined as follows:

(a) For securities not subject to investment letters or other similar restrictions on free marketability,

(i) if traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange or market over the 30-period ending three (3) days prior to the closing of such transaction;

(ii) if actively traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the 30-day period ending three (3) days prior to the closing of such transaction; or

(iii) if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors.

(b) The method of valuation of securities subject to investment letters or other similar restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall take into account an appropriate discount (as determined in good faith by the Board of Directors) from the market value as determined pursuant to clause (a) above so as to reflect the approximate fair market value thereof.

(c) For any property not addressed by Subsection 2.3.3(a) or Subsection 2.3.3(b), the value of such property, shall be determined in good faith by the Board of Directors, including a majority of the Preferred Directors.

2.3.4 Allocation of Escrow or Contingent Payments. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Subsection 2.3.4, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations or otherwise subject to contingencies in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of a meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect three (3) directors of the Corporation (each, a "**Series A Director**" and collectively, the "**Series A Directors**") and the holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the "**Series B Director**", and together with the Series A Directors, the "**Preferred Directors**"); provided, however, for administrative convenience, the initial Series B Director may also be appointed by the Board of Directors in connection with the approval of the initial issuance of the Series B Preferred Stock without a separate action by the holders of Series B Preferred Stock. Any Preferred Director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders in lieu of a meeting duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Preferred Stock fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Preferred Stock elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class on an as-converted basis, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3.3 Preferred Stock Protective Provisions. At any time when any shares of Preferred Stock are outstanding, the Corporation or any of its subsidiaries, shall not, either directly or indirectly by amendment, merger, consolidation, recapitalization, reclassification or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders representing the Required Vote, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger, acquisition or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation;

3.3.3 create or authorize the creation of or issue or obligate itself to issue shares of any other security convertible into or exercisable for any equity security or increase the authorized number of shares of Preferred Stock or of any additional class or series of capital stock unless it ranks junior to the Preferred Stock with respect to its rights, preferences and privileges;

3.3.4 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Preferred Stock in respect of any such right, preference or privilege;

3.3.5 purchase or redeem or pay or declare any dividend, other than dividends on the Preferred Stock, or make any distribution on any shares of capital stock prior to the Preferred Stock, other than Common Stock or options to acquire Common Stock repurchased from former employees or consultants in connection with the cessation of their employment/services, pursuant to the provisions of existing plans or agreements;

3.3.6 create, adopt, amend, terminate or repeal any equity (or equity-linked) compensation plan;

3.3.7 increase or decrease the authorized number of directors constituting the Board of Directors, change the number of votes entitled to be cast by any director or directors on any matter, or adopt any provision inconsistent with Article Sixth;

3.3.8 create or hold (or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue) any shares of capital stock in any subsidiary that is not a wholly-owned subsidiary of the Corporation, or sell, lease, transfer, exclusively license or otherwise dispose of any direct or indirect subsidiary capital stock or all or substantially all of any direct or indirect subsidiary assets; or

3.3.9 sell, assign, license, pledge or encumber material technology or intellectual property, or enter into or grant any royalty streams related thereto, other than licenses granted in the ordinary course of business.

4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Original Issue Price by the Conversion Price (as defined below) in effect at the time of conversion. Notwithstanding the foregoing, the option to convert a share of Preferred Stock into shares of Common Stock pursuant to the first sentence of this Subsection 4.1.1 (but, for the avoidance of doubt, not the mandatory conversion provisions provided in Section 5A) shall not be effective until immediately after the Voluntary Conversion Stay Date (as defined in the Purchase Agreement (as defined below)), unless the Required Vote specify otherwise in writing. The "**Series A Conversion Price**" shall initially be equal to $1.00. The "**Series B Conversion Price**" shall initially be equal to $1.23297. The "**Conversion Price**" shall mean the Series A Conversion Price, in the case of the Series A Preferred Stock, and the Series B Conversion Price, in the case of the Series B Preferred Stock. Such initial Conversion Price of each series of Preferred Stock, and the rate at which shares of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a notice of redemption of any shares of Preferred Stock pursuant to Subsection 2.3.2(c), the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such Redemption Date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock; provided that the foregoing termination of Conversion Rights shall not affect the amount(s) otherwise paid or payable in accordance with Subsection 2.1 to holders of Preferred Stock pursuant to such liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors, including a majority of the Preferred Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing.

The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment of any dividends declared but unpaid thereon and to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price shall be made for any dividends on the Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) "**Original Issue Date**" shall mean the date on which the first share of Series B Preferred Stock was issued.

(c) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on, or upon the conversion of, Preferred Stock and shares of Common Stock actually issued upon the exercise of such Options, or upon the conversion or exchange of such Convertible Securities or, in the case of Convertible Securities and Options therefor, upon the conversion or exchange of such Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8 below, and shares of Common Stock actually issued upon the exercise of such Options, or upon the conversion or exchange of such Convertible Securities or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(iii) shares of Common Stock issued in a QPO (as defined below).

(iv) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors, including at least a majority of the Preferred Directors, and shares of Common Stock actually issued upon the exercise or conversion of such Options, in each case provided such issuance is pursuant to the terms of such Option;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors, including a majority of the Preferred Directors, and shares of Common Stock actually issued upon the exercise of such Options, or upon the conversion or exchange of such Convertible Securities or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security; and

(vi) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors, including at least a majority of the Preferred Directors, and shares of Common Stock issuable upon the exercise of such Options, or upon the conversion or exchange of such Convertible Securities or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security.

4.4.2 No Adjustment of Conversion Price. No adjustment in the Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders representing the Required Vote agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or if any other adjustment is made pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date), are revised after the Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, the Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Conversion Price in effect immediately prior to such issuance or deemed issuance, then the Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP_2" shall mean the Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) "CP_1" shall mean the Conversion Price in effect immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or deemed issuance or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued or deemed issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received that is attributable to the Additional Shares of Common Stock, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4 above then, upon the final such issuance, the Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors, including a majority of the Preferred Directors) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock. For the avoidance of doubt, nothing in this Section 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the General Corporation Law in connection with a merger triggering an adjustment hereunder, nor shall this Subsection 4.8 be deemed conclusive evidence of the fair value of the shares of Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than fifteen (15) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than fifteen (15) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation, winding-up or a Deemed Liquidation Event is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation, winding-up or a Deemed Liquidation Event, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the date and time, or the occurrence of an event, specified by vote or written consent of holders representing the Required Vote or (b) the closing of the sale of shares of Common Stock to the public at a price of at least $1.849455 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the **"Securities Act"**), resulting in at least $50 million of gross proceeds, after deducting the underwriting discounts and commissions, to the Corporation and in connection with such offering the Common Stock is listed for trading on the Nasdaq Stock Market's National Market, the New York Stock Exchange or another exchange or marketplace approved by the Board of Directors, including the approval of at least a majority of the Preferred Directors (such an event a "**QPO**") (the date and time specified or the time of the event specified in such vote or written consent, or the time of such closing, respectively, is referred to herein as the "**Mandatory Conversion Time**"), (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate thereof, and (ii) such shares of Preferred Stock may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice.

If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

5A. Special Mandatory Conversion.

5A.1. Trigger Event. If a holder of Series B Preferred Stock fails to purchase at least his, her, or its Pro Rata Portion (as defined in the Series B Preferred Stock Purchase Agreement, dated on or about the Original Issue Date, by and among the Corporation and the other parties listed therein as "Purchasers" (as the same may be amended, restated or otherwise modified from time to time in accordance with the terms thereof, the "**Purchase Agreement**")) after the Initial Closing (as defined in the Purchase Agreement) and before the Second Tranche Closing (as defined in the Purchase Agreement) or in the Second Tranche Closing of any series of Series B Preferred Stock allocated to such holder under the Purchase Agreement, in such Second Tranche Closing, on the terms and subject to the conditions set forth in the Purchase Agreement, then, unless the Requisite Purchasers (as defined in the Purchase Agreement) elect otherwise in writing, each share of Series B Preferred Stock held by such holder shall then be automatically, and without any further action on the part of such holder, be converted into that number of shares of Common Stock equal to the product of (i) 0.10 multiplied by (ii) the quotient of the Original Issue Price divided by the Conversion Price then in effect for such share of Series B Preferred Stock immediately prior to the consummation of the Second Tranche Closing, rounding down to the nearest whole share, effective upon subject to, and concurrently with, the consummation of the Second Tranche Closing. For purposes of determining if a holder of Series B Preferred Stock has purchased its Pro Rata Portion after the Initial Closing and before the Second Tranche Closing or in the Second Tranche Closing, all securities purchased by Affiliates (as defined in the Purchase Agreement) of such holder shall be aggregated with the securities purchased by such holder (provided that no shares or securities shall be attributed to more than one entity or person within any such group of affiliated entities or persons). Such conversion is referred to as a "**Special Mandatory Conversion.**"

5A.2. Procedural Requirements. Upon a Special Mandatory Conversion, each holder of shares of Series B Preferred Stock converted pursuant to Subsection 5.A.1 shall be sent written notice of such Special Mandatory Conversion and the place designated for mandatory conversion of all such shares of Series B Preferred Stock pursuant to this Subsection 5.A. Upon receipt of such notice, each holder of such shares of Series B Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that any such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice.

If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series B Preferred Stock converted pursuant to Subsection 5.A.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the time of the Special Mandatory Conversion (notwithstanding the failure of the holder or holders thereof to surrender any certificates for such shares at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders therefor (or lost certificate affidavit and agreement), to receive the items provided for in the next sentence of this Subsection 5.A.2. As soon as practicable after the Special Mandatory Conversion and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series B Preferred Stock so converted, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series B Preferred Stock converted. Such converted Series B Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series B Preferred Stock accordingly.

5A.3. Effect of Mandatory Conversion. Such converted Series B Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series B Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed, converted or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption, conversion or acquisition.

7. Waiver. Any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders representing the Required Vote.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by this Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by this Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation. Each director shall be entitled to one (1) vote on each matter presented to the Board of Directors; provided, however, that, so long as the holders of Preferred Stock are entitled to elect a Preferred Director, the affirmative vote a majority of the Preferred Directors shall be required for the authorization by the Board of Directors of any of the matters set forth in Section 5.4 of the Amended and Restated Investors' Rights Agreement, dated on or about the Original Issue Date, by and among the Corporation and the other parties thereto, as such agreement may be amended from time to time.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation while such Covered Person is performing services in such capacity. Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders representing the Required Vote, will be required to amend or repeal, or to adopt any provisions inconsistent with this Article Eleventh.

TWELFTH: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Certificate of Incorporation from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors (in addition to any other consent required under this Certificate of Incorporation), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined therein) shall be deemed to be zero (0).

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

[*REMAINDER OF PAGE INTENTIONALLY LEFT BLANK*]

IN WITNESS WHEREOF, the Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 27th day of June, 2023.

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: Chief Executive Officer

CERTIFICATE OF AMENDMENT
OF THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
SEPTERNA, INC.

Septerna, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

DOES HEREBY CERTIFY:

1. That the name of the Corporation is Septerna, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on December 5, 2019 under the name GPCR NewCo, Inc. The Corporation amended its Certificate of Incorporation by certain certificates of amendment dated as of June 4, 2021, which changed the Corporation's name to Septerna, Inc., and October 26, 2021. The Corporation's Certificate of Incorporation was amended and restated by that certain Amended and Restated Certificate of Incorporation dated as of November 2, 2021, and further amended and restated by that certain Amended and Restated Certificate of Incorporation dated as of June 27, 2023.

2. That the Board of Directors of the Corporation duly adopted resolutions proposing to amend the Amended and Restated Certificate of Incorporation of the Corporation, declaring said amendment to be advisable and in the best interests of the Corporation and its stockholders, and authorizing the appropriate officers of the Corporation to solicit the consent of the stockholders therefor, which resolutions setting forth the proposed amendments are as follows:

RESOLVED, that the following is hereby inserted into Article FOURTH immediately before the first sentence therein:

"Effective upon the filing of this Certificate of Amendment of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), every 8.6103 shares of Common Stock then issued and outstanding or held in the treasury of the Corporation immediately prior to the Effective Time shall automatically be combined into one (1) share of Common Stock, without any further action by the holders of such shares (the "Reverse Stock Split"). The Reverse Stock Split will be effected on a certificate-by-certificate basis, and any fractional shares resulting from such combination shall be rounded down to the nearest whole share on a certificate-by-certificate basis. No fractional shares shall be issued in connection with the Reverse Stock Split. In lieu of any fractional shares to which a holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Corporation's Board of Directors. The Reverse Stock Split shall occur automatically without any further action by the holders of the shares of Common Stock and Preferred Stock affected thereby. All rights, preferences and privileges of the Common Stock and the Preferred Stock shall be appropriately adjusted to reflect the Reverse Stock Split in accordance with this Amended and Restated Certificate of Incorporation."

3. That the foregoing amendment was approved by the holders of the requisite number of shares of the Corporation in accordance with Section 228 of the General Corporation Law.

4. That said amendment has been duly adopted in accordance with Section 242 of the General Corporation Law.

5. All other provisions of the Amended and Restated Certificate of Incorporation shall remain in full force and effect.

[Signature Page to Follow]

IN WITNESS WHEREOF, this Certificate of Amendment has been executed by a duly authorized officer of the Corporation on this 18th day of October.

/s/ Jeffrey Finer
Name: Jeffrey Finer
Title: President

SIGNATURE PAGE TO CERTIFICATE OF AMENDMENT

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SEPTERNA, INC.

Septerna, Inc., a corporation organized and existing under the laws of the State of Delaware (the "**Corporation**"), hereby certifies as follows:

1. The name of the Corporation is Septerna, Inc. The date of the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was December 5, 2019 (the "**Original Certificate**"). The name under which the Corporation filed the Original Certificate was GPCR NewCo, Inc. The name of the corporation was changed on June 4, 2021 to Septerna, Inc.

2. The Original Certificate was amended by certain certificates of amendment dated as of June 4, 2021 and October 26, 2021 and was amended and restated by that certain Amended and Restated Certificate of Incorporation dated as of November 2, 2021 and further amended and restated by that certain Amended and Restated Certificate of Incorporation dated as of June 27, 2023. This Amended and Restated Certificate of Incorporation (this "**Certificate**") amends, restates and integrates the provisions of the Amended and Restated Certificate of Incorporation that was filed with the Secretary of State of the State of Delaware on June 27, 2023 (the "**Amended and Restated Certificate**"), and was duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware (the "**DGCL**").

3. The text of the Amended and Restated Certificate is hereby amended, restated and integrated in its entirety to provide as follows.

ARTICLE I

The name of the Corporation is Septerna, Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

CAPITAL STOCK

The total number of shares of capital stock which the Corporation shall have authority to issue is five hundred ten million (510,000,000), of which (i) five hundred million (500,000,000) shares shall be a class designated as common stock, par value $0.001 per share (the "**Common Stock**"), and (ii) ten million (10,000,000) shares shall be a class designated as undesignated preferred stock, par value $0.001 per share (the "**Preferred Stock**").

Except as otherwise provided in any certificate of designation of any series of Preferred Stock, the number of authorized shares of the class of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares of such class then outstanding) by the affirmative vote of the holders of a majority in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the DGCL, and no vote of the holders of any of the Common Stock or the Preferred Stock voting separately as a class shall be required therefor. For the avoidance of doubt, the elimination and reduction of the voting requirements of Section 242 of the DGCL, as permitted by Section 242(d) of the DGCL, shall apply to any amendments to the Amended and Restated Certificate of Incorporation (the "Certificate").

The powers, preferences and rights of, and the qualifications, limitations and restrictions upon, each class or series of stock shall be determined in accordance with, or as set forth below in, this Article IV.

A. COMMON STOCK

Subject to all the rights, powers and preferences of the Preferred Stock and except as provided by law or in this Certificate (including any certificate of designation of any series of Preferred Stock):

(a) the holders of the Common Stock shall have the exclusive right to vote for the election of directors of the Corporation (the "**Directors**") and on all other matters requiring stockholder action, each outstanding share entitling the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate (including any amendment to a certificate of designation of any series of Preferred Stock) that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of Preferred Stock if the holders of such affected series of Preferred Stock are entitled to vote, either separately or together with the holders of one or more other such series, on such amendment pursuant to this Certificate (including any certificate of designation of any series of Preferred Stock) or pursuant to the DGCL;

(b) dividends may be declared and paid or set apart for payment upon the shares of Common Stock out of any assets or funds of the Corporation legally available for the payment of dividends, but only when, as and if declared by the Board of Directors of the Corporation (the "**Board**") or any authorized committee thereof; and

(c) upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the net assets of the Corporation shall be distributed pro rata to the holders of the Common Stock.

B. PREFERRED STOCK

The Board of Directors or any authorized committee thereof is expressly authorized to provide by resolution or resolutions for, out of the unissued shares of Preferred Stock, the issuance of the shares of Preferred Stock in one or more series of such stock, and by filing a certificate of designation pursuant to applicable law of the State of Delaware, to establish or change from time to time the number of shares of each such series, and to fix the designations, powers, including voting powers, full or limited, or no voting powers, preferences and the relative, participating, optional or other special rights of the shares of each series and any qualifications, limitations and restrictions thereof, all to the fullest extent now or hereafter permitted by the DGCL. The powers, preferences and relative, participating, optional and other special rights of each such series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. Without limiting the generality of the foregoing, the resolution or resolutions providing for the issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law.

ARTICLE V

STOCKHOLDER ACTION

1. Action without Meeting. Subject to the rights, if any, of the holders of shares of any series of Preferred Stock, any action required or permitted to be taken by the stockholders of the Corporation at any annual or special meeting of stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders and may not be taken or effected by a consent of stockholders in lieu thereof.

2. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of shares of any series of Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors, and special meetings of stockholders may not be called by any other person or persons. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

ARTICLE VI

DIRECTORS

1. General. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided herein or required by law.

2. Number of Directors; Term of Office. Except as otherwise provided for or fixed pursuant to the provisions of Article IV (including any certificate of designation with respect to any series of Preferred Stock) and this Article VII relating to the rights of the holders of any series of Preferred Stock to elect additional Directors, the number of Directors shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The Directors, other than those who may be elected by the holders of any series of Preferred Stock, shall be classified, with respect to the term for which they severally hold office, into three classes. The term of office of the initial Class I Directors shall expire at the first regularly-scheduled annual meeting of stockholders following the closing of the Corporation's sale of a class of its capital stock to the public pursuant to a registration statement on Form S-1 under the Securities Act (the "**IPO Time**"). The term of office of the initial Class II Directors shall expire at the second annual meeting of stockholders following the IPO Time. The term of office of the initial Class III Directors shall expire at the third annual meeting of stockholders following the IPO Time. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification of the Board of Directors becomes effective. At each annual meeting of stockholders, Directors elected to succeed those Directors whose terms expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election. Notwithstanding the foregoing, the Directors elected to each class shall hold office until their successors are duly elected and qualified or until their earlier resignation, death, disqualification or removal. No decrease in the number of Directors shall shorten the term of any incumbent Director. There shall be no cumulative voting in the election of Directors. Election of Directors need not be by written ballot unless the Bylaws of the Corporation so provide.

Notwithstanding the foregoing, whenever, pursuant to the provisions of Article IV of this Certificate, the holders of any one or more series of Preferred Stock shall have the right, voting separately as a series or together with holders of other such series, to elect additional Directors, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Certificate, including any certificate of designation applicable to such series of Preferred Stock. During any period when the holders of any series of Preferred Stock, voting separately as a series or together with one or more series, have the right to elect additional Directors, then upon commencement and for the duration of the period during which such right continues: (i) the then otherwise total authorized number of Directors shall automatically be increased by such specified number of Directors, and the holders of such Preferred Stock shall be entitled to elect the additional Directors so provided for or fixed pursuant to said provisions, and (ii) each such additional Director shall serve until such Director's successor shall have been duly elected and qualified, or until such Director's right to hold

such office terminates pursuant to said provisions, whichever occurs earlier, subject to such Director's earlier death, resignation, retirement, disqualification or removal. Notwithstanding any other provision of this Certificate of Incorporation, except as otherwise provided by the Board in the resolution or resolutions establishing such series, whenever the holders of any series of Preferred Stock having such right to elect additional Directors are divested of such right pursuant to the provisions of such stock, the terms of office of all such additional Directors elected by the holders of such stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional Directors, shall forthwith terminate (in which case each such Director shall thereupon cease to be qualified as, and shall cease to be, a Director) and the total authorized number of Directors shall automatically be reduced accordingly.

3. Vacancies and Newly Created Directorships. Subject to the rights, if any, of the holders of any series of Preferred Stock to elect Directors and to fill vacancies in the Board of Directors relating thereto, any and all vacancies and newly created directorships in the Board of Directors, however occurring, including, without limitation, by reason of an increase in the size of the Board of Directors, or the death, resignation, disqualification or removal of a Director, shall be filled solely and exclusively by the affirmative vote of a majority of the remaining Directors then in office, even if less than a quorum of the Board of Directors, or by a sole remaining Director, and not by the stockholders. Any Director appointed in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of Directors in which the new directorship was created or the vacancy occurred and until such Director's successor shall have been duly elected and qualified or until such Director's earlier resignation, disqualification, death or removal. Subject to the rights, if any, of the holders of any series of Preferred Stock to elect Directors, when the number of Directors is increased or decreased, the Board of Directors shall, subject to Article VI.3 hereof, determine the class or classes to which the increased or decreased number of Directors shall be apportioned. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law, shall exercise the powers of the full Board of Directors until the vacancy is filled.

4. Removal. Subject to the rights, if any, of any series of Preferred Stock to elect Directors and to remove any Director whom the holders of any such series have the right to elect, any Director may be removed from office (i) only for cause and (ii) only by the affirmative vote of the holders not less than two-thirds (2/3) of the voting power of the outstanding shares of capital stock then entitled to vote at an election of Directors.

ARTICLE VII

LIMITATION OF LIABILITY

1. Directors. To the fullest extent permitted by the DGCL, as the same exists or may hereafter be amended from time to time, a Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of such Director's fiduciary duty as a Director, except for liability (a) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which

involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the Director derived an improper personal benefit. If the DGCL is amended after the effective date of this Certificate to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

2. Officers. To the fullest extent permitted by the DGCL, as the same exists or may thereafter be amended from time to time, an Officer (as defined below) of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of such Officer's fiduciary duty as an officer of the Corporation, except for liability (a) for any breach of the Officer's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) for any transaction from which the Officer derived an improper personal benefit, or (d) arising from any claim brought by or in the right of the Corporation. If the DGCL is amended after the effective date of this Certificate to authorize corporate action further eliminating or limiting the personal liability of Officers, then the liability of an Officer of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended. For purposes of this Article VII, "Officer" shall mean an individual who has been duly appointed as an officer of the Corporation and who, at the time of an act or omission as to which liability is asserted, is deemed to have consented to service by the delivery of process to the registered agent of the Corporation as contemplated by 10 Del. C. § 3114(b).

3. Amendment or Modification. Any amendment, repeal or modification of this Article VII or any amendment to the DGCL, shall not adversely affect any right or protection existing at the time of such amendment, repeal or modification with respect to any acts or omissions occurring before such amendment, repeal or modification of a person serving as a Director or Officer, as applicable, at the time of such amendment, repeal or modification.

ARTICLE VIII

AMENDMENT OF BYLAWS

1. Amendment by Directors. Except as otherwise provided by law, the Bylaws of the Corporation may be adopted, amended or repealed by the Board of Directors.

2. Amendment by Stockholders. Except as otherwise provided therein, the Bylaws of the Corporation may be amended or repealed by the stockholders by the affirmative vote of the holders of at least two-thirds (2/3) of the voting power of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal, such amendment or repeal shall only require the affirmative vote of the holders of a majority of the voting power of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class.

ARTICLE IX

AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend or repeal this Certificate in the manner now or hereafter prescribed by statute and this Certificate, and all rights conferred upon stockholders herein are granted subject to this reservation. For the avoidance of doubt, the provisions of Sections 242(d)(1) and (d)(2) of the DGCL shall apply to the Corporation.

[End of Text]

THIS AMENDED AND RESTATED CERTIFICATE OF INCORPORATION is executed as of this day of .

SEPTERNA, INC.

By: _____
Name: Jeffrey Finer
Title: President

AMENDED AND RESTATED
BYLAWS
OF
SEPTERNA, INC.

(the "**Corporation**")

ARTICLE I

Stockholders

SECTION 1. Annual Meeting. The annual meeting of stockholders (any such meeting being referred to in these Bylaws as an "**Annual Meeting**") shall be held at the hour, date and place within or without the United States that is fixed by or in the manner determined by the Board of Directors and stated in the notice of the meeting, which time, date and place may subsequently be changed at any time, before or after the notice for such meeting has been sent to the stockholders, by vote of the Board of Directors. The Board of Directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the General Corporation Law of the State of Delaware (the "**DGCL**"). In the absence of any such designation or determination, stockholders' meetings shall be held at the Corporation's principal executive office. If no Annual Meeting has been held for a period of thirteen (13) months after the Corporation's last Annual Meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of these Bylaws or otherwise, all the force and effect of an Annual Meeting. Any and all references hereafter in these Bylaws to an Annual Meeting or Annual Meetings also shall be deemed to refer to any special meeting(s) in lieu thereof.

SECTION 2. Notice of Stockholder Business and Nominations.

(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors of the Corporation (the "**Board of Directors**") and the proposal of other business to be considered by the stockholders may be brought before an Annual Meeting (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice of the Annual Meeting provided for in this Bylaw, who is entitled to vote at the meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in this Bylaw as to such nomination or business. For the avoidance of doubt, the foregoing clause (ii) shall be the exclusive means for a stockholder to bring nominations or business properly before an Annual Meeting (other than matters properly brought under Rule 14a-8 (or any successor rule) under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), and such stockholder must comply with the notice and other procedures set forth in Article I, Section 2(a)(2), (3) and (4) of this Bylaw to bring such nominations or business properly before an Annual Meeting. In addition to the other requirements set forth in this Bylaw, for any proposal of business to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (ii) of Article I, Section 2(a)(1) of this Bylaw, the stockholder must (i) have given Timely Notice (as defined below) thereof in writing to the Secretary of the Corporation, (ii) have provided any updates or supplements to such notice at the times and in the forms required by this Bylaw and (iii) together with the beneficial owner(s), if any, on whose behalf the nomination or business proposal is made, have acted in accordance with the representations set forth in the Solicitation Statement (as defined below) required by this Bylaw. To be timely, a stockholder's written notice must be received by the Secretary at the principal executive offices of the Corporation not later than 5:00 p.m. Pacific time on the ninetieth (90th) day nor earlier than 5:00 p.m. Pacific time on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's Annual Meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no Annual Meeting was held in the preceding year, notice by the stockholder to be timely must be received by the Secretary of the Corporation not later than 5:00 p.m. Pacific time on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made (such notice within such time periods shall be referred to as "**Timely Notice**"). Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the initial public offering of common stock of the Corporation, a stockholder's notice shall be timely if received by the Secretary at the principal executive offices of the Corporation not later than 5:00 p.m. Pacific time on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. Such stockholder's Timely Notice shall set forth or include:

(A) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence address of the nominee, (ii) the principal occupation or employment of the nominee, (iii) the class and number of shares of capital stock of the Corporation that are held of record or are beneficially owned by the nominee or its Affiliates or Associates (each as defined below) and any Synthetic Equity Interest (as defined below) held or beneficially owned by the nominee or its Affiliates or Associates, (iv) a description of all agreements, arrangements or understandings between or among the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder or concerning the nominee's potential service on the Board of Directors, (v) a questionnaire with respect to the background and qualifications of the nominee completed by the nominee in the form provided by the Corporation (which questionnaire shall be provided by the

Secretary upon written request of any stockholder of record identified by name within five (5) business days of such written request), (vi) a representation and agreement in the form provided by the Corporation (which form shall be provided by the Secretary upon written request of any stockholder of record identified by name within five (5) business days of such written request) that: (a) such proposed nominee is not and will not become party to any agreement, arrangement or understanding with any person or entity as to how such proposed nominee, if elected as a director of the Corporation, will act or vote on any issue or question (a "**Voting Commitment**") that has not been disclosed to the Corporation in the questionnaire described in clause (v) herein; (b) such proposed nominee is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation in the questionnaire described in clause (v) herein; (c) such proposed nominee would, if elected as a director, comply with all applicable rules and regulations of the exchanges upon which shares of the Corporation's capital stock trade, each of the Corporation's corporate governance, ethics, conflict of interest, confidentiality, stock ownership and trading policies and guidelines applicable generally to the Corporation's directors and, if elected as a director of the Corporation, such person currently would be in compliance with any such policies and guidelines that have been publicly disclosed; (d) such proposed nominee intends to serve as a director for the full term for which he or she is to stand for election; and (e) such proposed nominee will promptly provide to the Corporation such other information as it may reasonably request to determine the eligibility of such proposed nominee to serve on any committee or sub-committee of the Board of Directors under any applicable stock exchange listing requirements or applicable law, or that the Board of Directors reasonably determines could be material to a reasonable stockholder's understanding of the background, qualifications, experience, independence, or lack thereof, of such proposed nominee; and (vii) any other information relating to such proposed nominee that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including, without limitation, such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected);

(B) as to any other business that the stockholder proposes to bring before the meeting: a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, the text, if any, of any resolutions or Bylaw amendment proposed for adoption, and any material interest in such business of each Proposing Person (as defined below);

(C) (i) the name and address of the stockholder giving the notice, as they appear on the Corporation's books, and the names and addresses of the other Proposing Persons (if any) and (ii) as to each Proposing Person, the following information: (a) the class or series and number of all shares of capital stock of the Corporation that are, directly or indirectly, owned beneficially or of record by such Proposing Person or any of its Affiliates or Associates, including any shares of any class or series of capital stock of the Corporation as to which such Proposing Person or any of its Affiliates or Associates has a right to acquire beneficial ownership at any time in the future (whether or not such right is exercisable immediately or only after the passage of time or upon the satisfaction of any conditions or both) pursuant to any agreement, arrangement or understanding (whether or not in writing), (b) all Synthetic Equity Interests (as defined below) in which such Proposing Person or any of its Affiliates or Associates, directly or indirectly, holds an interest including a description of the material terms of each such Synthetic Equity Interest, including, without limitation, identification of the counterparty to each such Synthetic Equity Interest and disclosure, for each such Synthetic Equity Interest, as to (1) whether or not such Synthetic Equity Interest conveys any voting rights, directly or indirectly, in such shares to such Proposing Person or any of its Affiliates or Associates and (2) whether or not such Synthetic Equity Interest is required to be, or is capable of being, settled through delivery of such shares, (c) any proxy (other than a revocable proxy given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person or any of its Affiliates or Associates has or shares a right to, directly or indirectly, vote any shares of any class or series of capital stock of the Corporation, (d) any rights to dividends or other distributions on the shares of any class or series of capital stock of the Corporation, directly or indirectly, owned beneficially by such Proposing Person or any of its Affiliates or Associates that are separated or separable from the underlying shares of the Corporation, (e) if such Proposing Person is not a natural person, the identity of the natural person or persons responsible for making voting and investment decisions (including director nominations and any other business that the stockholder proposes to bring before a meeting) on behalf of the Proposing Person (irrespective of whether such person or persons have "beneficial ownership" for purposes of Rule 13d-3 of the Exchange Act of any securities owned of record or beneficially by the Proposing Person) (such person or persons, the "**Responsible Person**"), (f) any pending or threatened litigation in which such Proposing Person or any of its Affiliates or Associates or any Responsible Person is a party involving the Corporation or any of its officers or directors, or any Affiliate of the Corporation, and (g) any other information relating to such Proposing Person or any of its Affiliates or Associates that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such Proposing Person in support of the business proposed to be brought before the meeting pursuant to Section 14(a) of the Exchange Act (the disclosures to be made pursuant to the foregoing clauses (a) through (g) are referred to, collectively, as "**Material Ownership Interests**"); provided, however, that the Material Ownership Interests shall not include any such disclosures with respect to the ordinary course business activities of any broker, dealer, commercial bank, trust company or other nominee who is a Proposing Person solely as a result of being the stockholder of record directed to prepare and submit the notice required by these Bylaws on behalf of a beneficial owner;

(D) (i) a description of all agreements, arrangements or understandings to which any Proposing Person or any of its Affiliates or Associates is a party (whether the counterparty or counterparties are a Proposing Person or any Affiliate or Associate thereof, on the one hand, or one or more other third parties, on the other hand, (including any proposed nominee(s)) (a) pertaining to the nomination(s) or other business proposed to be brought before the meeting of stockholders or (b) entered into for the purpose of acquiring, holding, disposing or voting of any shares of any class or series of capital stock of the Corporation (which description shall identify the name of each other person who is party to such an agreement, arrangement or understanding) and (ii) identification of the names and addresses of other stockholders (including beneficial owners) known by any of the Proposing Persons to be providing financial support or meaningful assistance in furtherance of the nomination(s) or other business proposed to be brought before the meeting of stockholders and, to the extent known, the class and number of all shares of the Corporation's capital stock owned beneficially or of record by such other stockholder(s) or other beneficial owner(s); and

(E) a statement (i) that the stockholder is a holder of record of capital stock of the Corporation entitled to vote at such meeting, a representation that such stockholder intends to appear in person or by proxy at the meeting to propose such business or nominees and an acknowledgement that, if such stockholder (or a qualified representative of such stockholder) does not appear to present such business or proposed nominees, as applicable, at such meeting, the Corporation need not present such business or proposed nominees for a vote at such meeting, notwithstanding that proxies in respect of such vote may have been received by the Corporation, (ii) whether or not the stockholder giving the notice and/or the other Proposing Person(s), if any, (a) will deliver a proxy statement and form of proxy to holders of, in the case of a business proposal, at least the percentage of voting power of all of the shares of capital stock of the Corporation required under applicable law to approve the proposal or, in the case of a nomination or nominations, at least 67 percent of the voting power of all of the shares of capital stock of the Corporation entitled to vote on the election of directors or (b) otherwise solicit proxies or votes from stockholders in support of such proposal or nomination, as applicable, (iii) providing a representation as to whether or not such Proposing Person intends to solicit proxies in support of director nominees other than the Corporation's director nominees in accordance with Rule 14a-19 promulgated under the Exchange Act and (iv) that the stockholder will provide any other information relating to such item of business that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies in support of the business proposed to be brought before the meeting pursuant to Section 14(a) of the Exchange Act (such statement, the "**Solicitation Statement**").

For purposes of this Article I, the term "Proposing Person" shall mean the following persons: (i) the stockholder of record providing the notice of nominations or business proposed to be brought before a stockholders' meeting and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a stockholders' meeting is made. For purposes of this Section 2, each of the terms "Affiliates" and "Associates" shall have the meaning attributed to such term in Rule 12b-2 under the Exchange Act. For purposes of this Section 2, the term "Synthetic Equity Interest" shall mean any transaction, agreement or arrangement (or series of transactions, agreements or arrangements), including, without limitation, any derivative, swap, hedge, repurchase or so-called "stock borrowing" or securities lending agreement or arrangement, the purpose or effect of which is to, directly or indirectly: (a) give a person or entity economic benefit and/or risk similar to ownership of shares of any class or series of capital stock of the Corporation, in whole or in part, including due to the fact that such transaction, agreement or arrangement provides, directly or indirectly, the opportunity to profit, or share in any profit, or avoid a loss from any increase or decrease in the value of any shares of any class or series of capital stock of the Corporation, (b) mitigate loss to, reduce the economic risk of, or manage the risk of share price changes for, any person or entity with respect to any shares of any class or series of capital stock of the Corporation, or (c) increase or decrease the voting power of any person or entity with respect to any shares of any class or series of capital stock of the Corporation.

(3) A stockholder providing Timely Notice of nominations or business proposed to be brought before an Annual Meeting shall further update and supplement such notice, if necessary, so that the information (including, without limitation, the Material Ownership Interests information) provided or required to be provided in such notice pursuant to this Bylaw shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to such Annual Meeting, and such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than 5:00 p.m. Pacific time on the fifth (5th) business day after the record date for the Annual Meeting (in the case of the update and supplement required to be made as of the record date), and not later than 5:00 p.m. Pacific time on the eighth (8th) business day prior to the date of the Annual Meeting (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting). For the avoidance of doubt, the obligation to update as set forth in this Section 2(a)(3) shall not limit the Corporation's rights with respect to any deficiencies in any notice provided by a stockholder, extend any applicable deadlines hereunder, or enable or be deemed to permit a stockholder who has previously submitted notice hereunder to amend or update any proposal or nomination or to submit any new proposal, including by changing or adding nominees, matters, business and/or resolutions proposed to be brought before a meeting of the stockholders. Notwithstanding the foregoing, if a Proposing Person no longer plans to solicit proxies in accordance with its representation pursuant to Article I, Section 2(a)(2)(E), such Proposing Person shall inform the Corporation of this change by delivering a written notice to the Secretary at the principal executive offices of the Corporation no later than two (2) business days after making the determination not to proceed with a solicitation of proxies. A Proposing Person shall also update its notice so that the information required by Article I, Section 2(a)(2)(C) is current through the date of the meeting or any adjournment, postponement or rescheduling thereof, and such update shall be delivered in writing to the secretary at the principal executive offices of the Corporation no later than two (2) business days after the occurrence of any material change to the information previously disclosed pursuant to Article I, Section 2(a)(2)(C).

(4) Notwithstanding anything in the second sentence of Article I, Section 2(a)(2) of this Bylaw to the contrary, in the event that the number of directors to be elected to the Board of Directors is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with the second sentence of Article I, Section 2(a)(2), a stockholder's notice required by this Bylaw shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary of the Corporation not later than 5:00 p.m. Pacific time on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.

(b) General.

(1) Only such persons who are nominated in accordance with the provisions of this Bylaw shall be eligible for election and to serve as directors, and only such business shall be conducted at an Annual Meeting as shall have been brought before the meeting in accordance with the provisions of this Bylaw or in accordance with Rule 14a-8 under the Exchange Act. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this Bylaw. If neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this Bylaw, the chair of the meeting (as defined in Section 9 of this Article I) shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this Bylaw. If the Board of Directors or a designated committee thereof or the chair of the meeting, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this Bylaw, such proposal or nomination shall be disregarded and shall not be presented for action at the Annual Meeting.

(2) Except as otherwise required by law, nothing in this Article I, Section 2 shall obligate the Corporation or the Board of Directors to include in any proxy statement or other stockholder communication distributed on behalf of the Corporation or the Board of Directors information with respect to any nominee for director or any other matter of business submitted by a stockholder.

(3) Notwithstanding the foregoing provisions of this Article I, Section 2, if the nominating or proposing stockholder (or a qualified representative of the stockholder) does not appear at the Annual Meeting to present a nomination or any business, such nomination or business shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Article I,

Section 2, to be considered a qualified representative of the proposing stockholder, a person must be authorized by a written instrument executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders, and such person must produce such written instrument or electronic transmission, or a reliable reproduction of the written instrument or electronic transmission, to the chair of the meeting at the meeting of stockholders.

(4) For purposes of this Bylaw, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(5) Notwithstanding the foregoing provisions of this Bylaw, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder, including, but not limited to, Rule 14a-19 of the Exchange Act, with respect to the matters set forth in this Bylaw. If a stockholder fails to comply with any applicable requirements of the Exchange Act, including, but not limited to, Rule 14a-19 promulgated thereunder, such stockholder's proposed nomination or proposed business shall be deemed to have not been made in compliance with this Bylaw and shall be disregarded.

(6) Further notwithstanding the foregoing provisions of this Bylaw, unless otherwise required by law, (i) no Proposing Person shall solicit proxies in support of director nominees other than the Corporation's nominees unless such Proposing Person has complied with Rule 14a-19 promulgated under the Exchange Act in connection with the solicitation of such proxies, including the provision to the Corporation of notices required thereunder with timely notice and (ii) if any Proposing Person (A) provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act, (B) subsequently fails to comply with the requirements of Rule 14a-19(a)(2) or Rule 14a-19(a)(3) promulgated under the Exchange Act, including the provision to the Corporation of notices required thereunder with timely notice and (C) no other Proposing Person has provided notice pursuant to, and in compliance with, Rule 14a-19 under the Exchange Act that it intends to solicit proxies in support of the election of such proposed nominee in accordance with Rule 14a-19(b) under the Exchange Act, then such proposed nominee shall be disqualified from nomination, the Corporation shall disregard the nomination of such proposed nominee and no vote on the election of such proposed nominee shall occur. Upon request by the Corporation, if any Proposing Person provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act, such Proposing Person shall deliver to the Corporation, no later than five (5) business days prior to the applicable meeting date, reasonable evidence that it has met the requirements of Rule 14a-19(a)(3) promulgated under the Exchange Act.

(7) The number of nominees a stockholder may nominate for election at the Annual Meeting (or in the case of a stockholder giving the notice on behalf of a beneficial owner, the number of nominees a stockholder may nominate for election at the Annual Meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such Annual Meeting. A stockholder may not designate any substitute nominees unless the stockholder provides timely notice of such substitute nominee(s) in accordance with these By-laws (and such notice contains all of the information, representations, questionnaires and certifications with respect to such substitute nominee(s) that are required by the By-laws with respect to nominees for director).

SECTION 3. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Preferred Stock, special meetings of the stockholders of the Corporation may be called only by or at the direction of the Board of Directors. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation. Nominations of persons for election to the Board of Directors and stockholder proposals of other business shall not be brought before a special meeting of stockholders to be considered by the stockholders unless such special meeting is held in lieu of an annual meeting of stockholders in accordance with Article I, Section 1 of these Bylaws, in which case such special meeting in lieu thereof shall be deemed an Annual Meeting for purposes of these Bylaws and the provisions of Article I, Section 2 of these Bylaws shall govern such special meeting.

SECTION 4. Notice of Meetings; Adjournments.

(a) A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting, the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such stockholder at the address of such stockholder as it appears on the Corporation's stock transfer books. Without limiting the manner by which notice may otherwise be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

(b) Notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall also state the purpose or purposes for which the meeting has been called.

(c) Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed, or waiver of notice by electronic transmission is provided, before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance is for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

(d) The Board of Directors may postpone and reschedule or cancel any previously scheduled Annual Meeting or special meeting of stockholders and any record date with respect thereto, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I or otherwise. In no event shall the public announcement of an adjournment, postponement or rescheduling of any previously scheduled meeting of stockholders commence a new time period for the giving of a stockholder's notice under this Article I.

(e) When any meeting is convened, the chair of the meeting or the stockholders present or represented by proxy at such meeting may adjourn the meeting from time to time for any reason, regardless of whether a quorum is present, to reconvene at any other time and at any place at which a meeting of stockholders may be held under these Bylaws. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place (including an adjournment taken to address a technical failure to convene or continue a meeting using remote communication), notice need not be given of the adjourned meeting if the time, place, if any, thereof and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are (i) announced at the meeting at which the adjournment is taken, (ii) displayed, during the time scheduled for the meeting, on the same electronic network used to enable stockholders and proxy holders to participate in the meeting by means of remote communication or (iii) set forth in the notice of meeting given in accordance with this Section 4; provided, however, that if the adjournment is for more than thirty (30) days from the meeting date, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote thereat and each stockholder who, by law or under the Certificate of Incorporation of the Corporation (as the same may hereafter be amended and/or restated, the "**Certificate**") or these Bylaws, is entitled to such notice.

SECTION 5. Quorum. Except as otherwise provided by law, the certificate of incorporation or these Bylaws, at each meeting of stockholders, the presence in person or by remote communication, if applicable, or represented by proxy, of the holders of a majority in voting power of the outstanding shares of stock entitled to vote at the meeting shall be necessary and sufficient to constitute a quorum. If less than a quorum is present at a meeting, the chair of the meeting or the holders of voting stock, by the affirmative vote of a majority of the voting power present in person or by proxy and entitled to vote thereon, may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as otherwise provided in Section 4 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally noticed. The stockholders present at a duly constituted meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. Voting and Proxies.

(a) The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Article IV, Section 4 of these Bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation as of the record date, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the DGCL. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by or on behalf of any one of them unless at or prior to the exercise of the proxy the Corporation receives a specific written notice to the contrary from any one of them. In the event the Corporation receives proxies for disqualified or withdrawn nominees for the Board of Directors, such votes for such disqualified or withdrawn nominees in the proxies will be treated as abstentions.

(b) Any stockholder directly or indirectly soliciting proxies from other stockholders must use a proxy card color other than white, which shall be reserved for the exclusive use by the Board of Directors.

SECTION 7. Action at Meeting. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast for and against such matter, except where a larger vote is required by law, by the Certificate or by these Bylaws. Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors.

SECTION 8. Stockholder Lists. The Corporation shall prepare, no later than the tenth (10^{th}) day before each Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder; provided, however, that if the record date for determining the stockholders entitled to vote is less than ten (10) days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth (10th) day before the meeting date. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of ten (10) days ending on the day before the meeting date in the manner provided by law.

SECTION 9. Conduct of Meeting. The Board of Directors may adopt by resolution such rules, regulations and procedures for the conduct of any meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with rules, regulations and procedures adopted by the Board of Directors, the chair of the meeting shall have the right to prescribe such rules, regulations and procedures and to do all such acts, as, in the judgment of such chair, are necessary, appropriate or convenient for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of

Directors or the chair of the meeting, may include, without limitation, the following: (a) the establishment of an agenda for the meeting; (b) rules and procedures for maintaining order at the meeting and the safety of those present at the meeting; (c) limitations on attendance at or participation in the meeting to stockholders of record of the Corporation, their duly authorized and constituted proxies, or such other persons as the chair of the meeting shall determine; (d) restrictions on entry to the meeting after the time fixed for the commencement thereof; (e) the determination of the circumstances in which any person may make a statement or ask questions and limitations on the time allotted to questions or comments; (f) the determination of when the polls shall open and close for any given matter to be voted on at the meeting; (g) the exclusion or removal of any stockholders or any other individual who refuses to comply with meeting rules, regulations, or procedures; (h) restrictions on the use of audio and video recording devices, cell phones and other electronic devices; (i) rules, regulations and procedures for compliance with any federal, state or local laws or regulations (including those concerning safety, health or security); (j) procedures (if any) requiring attendees to provide the Corporation advance notice of their intent to attend the meeting; and (k) rules, regulations or procedures regarding the participation by means of remote communication of stockholders and proxy holders not physically present at a meeting, whether such meeting is to be held at a designated place or solely by means of remote communication. The chair of the meeting shall be: (i) such person as the Board of Directors shall have designated to preside over all meetings of the stockholders; (ii) if the Board of Directors has not so designated such a chair of the meeting or if the chair of the meeting is unable to so preside or is absent, then the Chairperson of the Board, if one is elected; (iii) if the Board of Directors has not so designated a chair of the meeting and there is no Chairperson of the Board, or if the chair of the meeting or the Chairperson of the Board is unable to so preside or is absent, then the Chief Executive Officer, if one is elected; or (iv) in the absence or inability to serve of any of the aforementioned persons, the President of the Corporation. Unless and to the extent determined by the Board of Directors or the chair of the meeting, the chair of the meeting shall not be obligated to adopt or follow any technical, formal or parliamentary rules or principles of procedure. In the absence of the Secretary of the Corporation, the secretary of the meeting shall be such person as the chair of the meeting appoints.

SECTION 10. Inspectors of Elections. The Corporation shall, in advance of any meeting of stockholders, appoint one or three inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the chair of the meeting officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The chair of the meeting may review all determinations made by the inspectors, and in so doing the chair of the meeting shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the chair of the meeting, shall be subject to further review by any court of competent jurisdiction.

ARTICLE II

Directors

SECTION 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors, except as otherwise provided by the Certificate or required by law.

SECTION 2. Number and Terms. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors, provided the Board of Directors shall consist of at least one (1) member. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. Qualification. No director need be a stockholder of the Corporation.

SECTION 4. Vacancies. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. Removal. Directors may be removed from office only in the manner provided in the Certificate or by applicable law.

SECTION 6. Resignation. A director may resign at any time by electronic transmission or by giving written notice to the Chairperson of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. Regular Meetings. Regular meetings of the Board of Directors may be held at such hour, date and place (if any) as the Board of Directors may from time to time determine and publicize by means of reasonable notice given to any director who is not present when such determination is made.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called, orally or in writing, by or at the request of a majority of the directors, the Chairperson of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place (if any) thereof. Notice thereof shall be given to each director as provided in Section 9 of this Article II.

SECTION 9. Notice of Meetings. Notice of the hour, date and place (if any) of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the Chairperson of the Board, if one is elected, the President or such other officer designated by the Chairperson of the Board, if one is elected, or any one of the directors calling the meeting. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of

electronic communication, sent to his or her business or home address, at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least forty-eight (48) hours in advance of the meeting provided, however, that if the person or persons calling the meeting determine that it is otherwise necessary or advisable to hold the meeting sooner, then such person or persons may prescribe a shorter time period for notice to be given personally or by telephone, facsimile, electronic mail or other similar means of communication. Such notice shall be deemed to be delivered when hand-delivered to such address; read to such director by telephone; deposited in the mail so addressed, with postage thereon prepaid, if mailed; or dispatched or transmitted if sent by facsimile transmission or by electronic mail or other form of electronic communication. A written waiver of notice signed or electronically transmitted before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these Bylaws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. Quorum. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice. Any business that might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present. For purposes of this Article II, the total number of directors includes any unfilled vacancies on the Board of Directors.

SECTION 11. Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the affirmative vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these Bylaws.

SECTION 12. Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission. After such action is taken, the writing or writings or electronic transmission or transmissions shall be filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors for all purposes.

SECTION 13. Manner of Participation. Directors may participate in meetings of the Board of Directors by means of video conference, conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these Bylaws.

SECTION 14. Presiding Director. The Board of Directors shall designate a representative to preside over all meetings of the Board of Directors, provided that if the Board of Directors does not so designate such a presiding director or such designated presiding director is unable to so preside or is absent, then the Chairperson of the Board, if one is elected, shall preside over all meetings of the Board of Directors. If both the designated presiding director, if one is so designated, and the Chairperson of the Board, if one is elected, are unable to preside or are absent, the Board of Directors shall designate an alternate representative to preside over a meeting of the Board of Directors.

SECTION 15. Committees. The Board of Directors may designate one or more committees, including, without limitation, a Compensation Committee, a Nominating & Corporate Governance Committee and an Audit Committee, and may delegate thereto some or all of its powers to such committee(s) except those which by law, by the Certificate or by these Bylaws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these Bylaws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings.

SECTION 16. Compensation of Directors. Directors shall receive such compensation for their services as shall be determined by the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees shall not receive any salary or other compensation for their services as directors of the Corporation.

SECTION 17. Emergency By-laws. In the event of any emergency, disaster, catastrophe or other similar emergency condition of a type described in Section 110(a) of the DGCL (an "**Emergency**"), notwithstanding any different or conflicting provisions in the DGCL, the Certificate or these By-laws, during such Emergency:

(a) A meeting of the Board of Directors or a committee thereof may be called by any director, the Chairperson of the Board, the Chief Executive Officer, the President or the Secretary by such means as, in the judgment of the person calling the meeting, may be feasible at the time, and notice of any such meeting of the Board of Directors or any committee may be given, in the judgment of the person calling the meeting, only to such directors as it may be feasible to reach at the time and by such means as may be feasible at the time. Such notice shall be given at such time in advance of the meeting as, in the judgment of the person calling the meeting, circumstances permit.

(b) The director or directors in attendance at a meeting called in accordance with Section 17(a) of this Article II shall constitute a quorum.

(c) No officer, director or employee acting in accordance with this Section 17 shall be liable except for willful misconduct. No amendment, repeal or change to this Section 17 shall modify the prior sentence with regard to actions taken prior to the time of such amendment, repeal or change.

ARTICLE III

Officers

SECTION 1. Enumeration. The officers of the Corporation shall consist of a President, a Treasurer, a Secretary and such other officers, including, without limitation, a Chairperson of the Board, a Chief Executive Officer and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine. Any number of offices may be held by the same person. The salaries and other compensation of the officers of the Corporation will be fixed by or in the manner designated by the Board of Directors or a committee thereof to which the Board of Directors has delegated such responsibility.

SECTION 2. Election. The Board of Directors shall elect the President, the Treasurer and the Secretary. Other officers may be elected by the Board of Directors or by such officers delegated such authority by the Board of Directors.

SECTION 3. Qualification. No officer need be a stockholder or a director.

SECTION 4. Tenure. Except as otherwise provided by the Certificate or by these Bylaws, each of the officers of the Corporation shall hold office until his or her successor is elected and qualified or until his or her earlier death, resignation or removal.

SECTION 5. Resignation and Removal. Any officer may resign by delivering his or her written or electronically transmitted resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt, unless the resignation otherwise provides. Any resignation is without prejudice to the rights, if any, of the Corporation under any contract to which the officer is a party. Except as otherwise provided by law or by resolution of the Board of Directors, the Board of Directors may remove any officer. Except as the Board of Directors may otherwise determine, no officer who resigns or is removed shall have any right to any compensation as an officer for any period following his or her resignation or removal, or any right to damages on account of such removal, whether his or her compensation be by the month or by the year or otherwise, unless such compensation is expressly provided in a duly authorized written agreement with the Corporation.

SECTION 6. Absence or Disability. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 7. Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 8. President. The President shall, subject to the direction of the Board of Directors, have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 9. Chairperson of the Board. The Chairperson of the Board, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 10. Chief Executive Officer. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 11. Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 12. Treasurer and Assistant Treasurers. The Treasurer shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities and valuable documents of the Corporation. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. Secretary and Assistant Secretaries. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board of Directors) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary or an Assistant Secretary shall have authority to affix it to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities. Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 14. Other Powers and Duties. Subject to these Bylaws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

SECTION 15. Representation of Shares of Other Corporations. The Chairperson of the Board, the President, any Vice President, the Treasurer, the Secretary or Assistant Secretary of this Corporation, or any other person authorized by the Board of Directors or the President or a Vice President, is authorized to vote, represent and exercise on behalf of this Corporation all rights incident to any and all securities of any other entity or entities standing in the name of this Corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

SECTION 16. Bonded Officers. The Board of Directors may require any officer to give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors upon such terms and conditions as the Board of Directors may specify, including, without limitation, a bond for the faithful performance of his or her duties and for the restoration to the Corporation of all property in his or her possession or under his or her control belonging to the Corporation.

ARTICLE IV

Capital Stock

SECTION 1. Certificates of Stock. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by any two authorized officers of the Corporation. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. Notwithstanding anything to the contrary provided in these Bylaws, the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares (except that the foregoing shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation), and by the approval and adoption of these Bylaws, the Board of Directors has determined that all classes or series of the Corporation's stock may be uncertificated, whether upon original issuance, re-issuance or subsequent transfer.

SECTION 2. Transfers. Subject to any restrictions on transfer and unless otherwise provided by the Board of Directors, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

SECTION 3. Stock Transfer Agreements. The Corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the Corporation to restrict the transfer of shares of stock of the Corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

SECTION 4. Record Holders. Except as may otherwise be required by law, by the Certificate or by these Bylaws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these Bylaws.

SECTION 5. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date: (a) in the case of determination of stockholders entitled to vote at any meeting of stockholders, shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting and (b) in the case of any other action, shall not be more than sixty (60) days prior to such other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at 5:00 p.m. Pacific time on the day next preceding the day on which notice is given, or, if notice is waived, at 5:00 p.m. Pacific time on the day next preceding the day on which the meeting is held; and (ii) the record date for determining stockholders for any other purpose shall be at 5:00 p.m. Pacific time on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 6. Replacement of Certificates. In case of the alleged loss, destruction or mutilation of a certificate of stock of the Corporation, a duplicate certificate may be issued in place thereof, upon such terms as the Board of Directors may prescribe.

ARTICLE V

Indemnification

SECTION 1. Definitions. For purposes of this Article V:

(a) “Corporate Status” describes the status of a person who is serving or has served (i) as a Director of the Corporation, (ii) as an Officer of the Corporation, (iii) as a Non-Officer Employee of the Corporation or (iv) as a director, partner, trustee, officer, employee or agent of

any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan, foundation, association, organization or other legal entity which such person is or was serving at the request of the Corporation. For purposes of this Section 1(a), a Director, Officer or Non-Officer Employee of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, "Corporate Status" shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person's activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(b) "Director" means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(c) "Disinterested Director" means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(d) "Expenses" means all attorneys' fees, retainers, court costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(e) "Liabilities" means judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement;

(f) "Non-Officer Employee" means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(g) "Officer" means any person who serves or has served the Corporation as an officer of the Corporation appointed by the Board of Directors of the Corporation;

(h) "Proceeding" means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitrative or investigative; and

(i) "Subsidiary" means any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) fifty percent (50%) or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) fifty percent (50%) or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

SECTION 2. Indemnification of Directors and Officers.

(a) Subject to the operation of Section 4 of this Article V, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), and to the extent authorized in this Section 2.

(1) Actions, Suits and Proceedings Other than By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses and Liabilities that are incurred or paid by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein (other than an action by or in the right of the Corporation), which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

(2) Actions, Suits and Proceedings By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses that are incurred by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein by or in the right of the Corporation, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, that no indemnification shall be made under this Section 2(a)(2) in respect of any claim, issue or matter as to which such Director or Officer shall have been finally adjudged by a court of competent jurisdiction to be liable to the Corporation, unless, and only to the extent that, the Court of Chancery of the State of Delaware or another court in which such Proceeding was brought shall determine upon application that, despite adjudication of liability, but in view of all the circumstances of the case, such Director or Officer is fairly and reasonably entitled to indemnification for such Expenses that such court deems proper.

(3) Survival of Rights. The rights of indemnification provided by this Section 2 shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives.

(4) Actions by Directors or Officers. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding (including any parts of such Proceeding not initiated by such Director or Officer) was authorized in advance by the Board of Directors, unless such Proceeding was brought to enforce such Officer's or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these Bylaws in accordance with the provisions set forth herein.

SECTION 3. Indemnification of Non-Officer Employees. Subject to the operation of Section 4 of this Article V, each Non-Officer Employee may, in the discretion of the Board of Directors, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses and Liabilities that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 3 shall exist as to a Non-Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized in advance by the Board of Directors.

SECTION 4. Determination. Unless ordered by a court, no indemnification shall be provided pursuant to this Article V to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (b) a committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (c) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion or (d) by the stockholders of the Corporation.

SECTION 5. Advancement of Expenses to Directors Prior to Final Disposition.

(a) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within thirty (30) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time,

whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding (including any parts of such Proceeding not initiated by such Director) was (i) authorized by the Board of Directors or (ii) brought to enforce such Director's rights to indemnification or advancement of Expenses under these Bylaws.

(b) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within thirty (30) days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and, if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel or stockholders) to make a determination concerning the permissibility of such advancement of Expenses under this Article V shall not be a defense to an action brought by a Director for recovery of the unpaid amount of an advancement claim and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(c) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 6. Advancement of Expenses to Officers and Non-Officer Employees Prior to Final Disposition.

(a) The Corporation may, at the discretion of the Board of Directors, advance any or all Expenses incurred by or on behalf of any Officer or any Non-Officer Employee in connection with any Proceeding in which such person is involved by reason of his or her Corporate Status as an Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer or Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such person to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(b) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 7. Contractual Nature of Rights.

(a) The provisions of this Article V shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this Article V is in effect, in consideration of such person's past or current and any future performance of services for the Corporation. Neither amendment, repeal or modification of any provision of this Article V nor the adoption of any provision of the Certificate inconsistent with this Article V shall eliminate or reduce any right conferred by this Article V in respect of any act or omission occurring, or any cause of action or claim that accrues or arises or any state of facts existing, at the time of or before such amendment, repeal, modification or adoption of an inconsistent provision (even in the case of a proceeding based on such a state of facts that is commenced after such time), and all rights to indemnification and advancement of Expenses granted herein or arising out of any act or omission shall vest at the time of the act or omission in question, regardless of when or if any proceeding with respect to such act or omission is commenced. The rights to indemnification and to advancement of expenses provided by, or granted pursuant to, this Article V shall continue notwithstanding that the person has ceased to be a director or officer of the Corporation and shall inure to the benefit of the estate, heirs, executors, administrators, legatees and distributees of such person.

(b) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within sixty (60) days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel or stockholders) to make a determination concerning the permissibility of such indemnification under this Article V shall not be a defense to an action brought by a Director or Officer for recovery of the unpaid amount of an indemnification claim and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(c) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 8. Non-Exclusivity of Rights. The rights to indemnification and to advancement of Expenses set forth in this Article V shall not be exclusive of any other right that any Director, Officer or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these Bylaws, agreement, vote of stockholders or Disinterested Directors or otherwise.

SECTION 9. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Article V.

SECTION 10. Other Indemnification. The Corporation's obligation, if any, to indemnify or provide advancement of Expenses to any person under this Article V as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification or advancement of Expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise (the "**Primary Indemnitor**"). Any indemnification or advancement of Expenses under this Article V owed by the Corporation as a result of a person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall only be in excess of, and shall be secondary to, the indemnification or advancement of Expenses available from the applicable Primary Indemnitor(s) and any applicable insurance policies.

SECTION 11. Savings Clause. If this Article V or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each indemnitee as to any expenses (including, without limitation, attorneys' fees), liabilities, losses, judgments, fines (including, without limitation, excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974, as amended) and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including, without limitation, an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article V that shall not have been invalidated and to the fullest extent permitted by applicable law.

ARTICLE VI

Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. Execution of Instruments. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairperson of the Board, if one is elected, the President or the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or an executive committee of the Board of Directors may authorize or determine.

SECTION 4. Voting of Securities. Unless the Board of Directors otherwise provides, the Chairperson of the Board, if one is elected, the President or the Treasurer may waive notice of, and act on behalf of the Corporation, or appoint another person or persons to act as proxy or attorney in fact for the Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or stockholders of any other corporation or organization, any of whose securities are held by the Corporation.

SECTION 5. Resident Agent. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

SECTION 6. Corporate Records. The original or attested copies of the Certificate, Bylaws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at an office of its counsel, at an office of its transfer agent or in such manner as may be permitted by law.

SECTION 7. Certificate. All references in these Bylaws to the Certificate shall be deemed to refer to the Certificate, as amended and/or restated and in effect from time to time.

SECTION 8. Exclusive Jurisdiction of Delaware Courts or the United States Federal District Courts. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of, or a claim based on, a breach of a fiduciary duty owed by any current or former director, officer or other employee or stockholder of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or the Certificate or these Bylaws (including the interpretation, validity or enforceability thereof) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (iv) any action asserting a claim governed by the internal affairs doctrine; provided, however, that this sentence will not apply to any causes of action arising under the Securities Act of 1933, as amended, or the Exchange Act, or to any claim for which the federal courts have exclusive jurisdiction. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, the Exchange Act, or the respective rules and regulations promulgated thereunder. To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Section 8.

SECTION 9. Amendment of Bylaws.

(a) Amendment by Directors. Except as otherwise required by law, these Bylaws may be amended or repealed by the Board of Directors.

(b) Amendment by Stockholders. Except as otherwise provided herein, the Bylaws of the Corporation may be amended or repealed at any annual meeting of stockholders, or at any special meeting of stockholders called for such purpose, by the affirmative vote of the holders of not less than two-thirds (2/3) of the voting power of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class.

SECTION 10. Notices. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

SECTION 11. Waivers. A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business to be transacted at, nor the purpose of, any meeting need be specified in such a waiver.

Adopted on October 18, 2024 and effective upon the effectiveness of the S-1 registration statement.

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

COMMON STOCK

PAR VALUE $0.001

COMMON STOCK

Certificate Number
ZQ00000000

Shares
000000
000000
000000
000000
000000

Septerna, Inc.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

MR. SAMPLE & MRS. SAMPLE & MR. SAMPLE & MRS. SAMPLE

SEE REVERSE FOR CERTAIN DEFINITIONS

CUSIP XXXXXX XX X

is the owner of

ZERO HUNDRED THOUSAND ZERO HUNDRED AND ZERO

THIS CERTIFICATE IS TRANSFERABLE IN CITIES DESIGNATED BY THE TRANSFER AGENT, AVAILABLE ONLINE AT www.computershare.com

FULLY-PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF

Septerna, Inc. (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the Certificate of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

DATED DD-MMM-YYYY

FACSIMILE SIGNATURE TO COME

President

SEPTERNA, INC. CORPORATE SEAL 12/5/2019 DELAWARE

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR,

FACSIMILE SIGNATURE TO COME

Secretary

By _____
AUTHORIZED SIGNATURE

SECURITY INSTRUCTIONS ON REVERSE

1234567

septerna

PO Box 43864, Providence RI 02940-3864

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4

CUSIP/IDENTIFIER XXXXXX XX X
Holder ID XXXXXXXXX
Insurance Value 1,000,000.00
Number of Shares 123456
DTC 12345678 1234567890123456

Certificate Numbers	Num	No. Denom.	Total
1234567890123456789O	1	1	1
1234567890123456789O	2	2	2
1234567890123456789O	3	3	3
1234567890123456789O	4	4	4
1234567890123456789O	5	5	5
1234567890123456789O	6	6	6
Total Transaction			7

SEPTERNA, INC.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT	- ..... (Cust) Custodian ..... (Minor)
TEN ENT	- as tenants by the entireties		under Uniform Gifts to Minors Act ..... (State)
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	- ..... (Cust) Custodian (until age .....)
			..... (Minor) under Uniform Transfers to Minors Act ..... (State)

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, _____ hereby sell, assign and transfer unto

_____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____

_____

_____ Shares

of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: _____ 20____

Signature: _____

Signature: _____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1234567

Exhibit 5.1

October 21, 2024

Septerna, Inc.
250 East Grand Avenue
South San Francisco, California 94080

Re: Securities Registered under Registration Statement on Form S-1

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-1 (File No. 333-282469) (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offering by Septerna, Inc, a Delaware corporation (the "Company"), of up to 12,578,125 shares (the "Shares") of the Company's Common Stock, par value $0.001 per share, including Shares purchasable by the underwriters upon their exercise of an over-allotment option granted to the underwriters by the Company. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Company Shares have been duly authorized and, when delivered and paid for in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and non-assessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP
GOODWIN PROCTER LLP

Exhibit 10.2

SEPTERNA, INC.

2024 STOCK OPTION AND INCENTIVE PLAN

SECTION 1. GENERAL PURPOSE OF THE PLAN; DEFINITIONS

The name of the plan is the Septerna, Inc. 2024 Stock Option and Incentive Plan (the "Plan"). The purpose of the Plan is to encourage and enable the officers, employees, Non-Employee Directors and Consultants of Septerna, Inc. (the "Company") and its Affiliates upon whose judgment, initiative and efforts the Company largely depends for the successful conduct of its business to acquire a proprietary interest in the Company. It is anticipated that providing such persons with a direct stake in the Company's welfare will assure a closer identification of their interests with those of the Company and its stockholders, thereby stimulating their efforts on the Company's behalf and strengthening their desire to remain with the Company or one of its Affiliates.

The following terms shall be defined as set forth below:

"Act" means the U.S. Securities Act of 1933, as amended, and the rules and regulations thereunder.

"Administrator" means either the Board or the compensation committee of the Board or a similar committee performing the functions of the compensation committee and which is comprised of not less than two Non-Employee Directors who are independent.

"*Affiliate*" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

"Award" or *"Awards,"* except where referring to a particular category of grant under the Plan, shall include Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Units, Restricted Stock Awards, Unrestricted Stock Awards, Cash-Based Awards, and Dividend Equivalent Rights.

"Award Agreement" means a written or electronic document setting forth the terms and provisions applicable to an Award granted under the Plan. Each Award Agreement is subject to the terms and conditions of the Plan.

"Board" means the Board of Directors of the Company.

"Cash-Based Award" means an Award entitling the recipient to receive a cash-denominated payment.

"Code" means the U.S. Internal Revenue Code of 1986, as amended, and any successor Code, and related rules, regulations and interpretations.

"Consultant" means a consultant or adviser who provides *bona fide* services to the Company or an Affiliate as an independent contractor and who qualifies as a consultant or advisor under Instruction A.1.(a)(1) of Form S-8 under the Act.

"Dividend Equivalent Right" means an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other award to which it relates) if such shares had been issued to and held by the grantee.

"Effective Date" means the date on which the Plan becomes effective as set forth in Section 19.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

"Fair Market Value" of the Stock on any given date means the fair market value of the Stock determined in good faith by the Administrator; provided, however, that if the Stock is listed on the National Association of Securities Dealers Automated Quotation System ("NASDAQ"), NASDAQ Global Market, The New York Stock Exchange or another national securities exchange or traded on any established market, the determination shall be made by reference to the closing price. If there is no closing price for such date, the determination shall be made by reference to the last date preceding such date for which there is a closing price; provided further, however, that if the date for which Fair Market Value is determined is the Registration Date, the Fair Market Value shall be the "Price to the Public" (or equivalent) set forth on the cover page for the final prospectus relating to the Company's initial public offering.

"Incentive Stock Option" means any Stock Option designated and qualified as an "incentive stock option" as defined in Section 422 of the Code.

"Non-Employee Director" means a member of the Board who is not also an employee of the Company or any Subsidiary.

"Non-Qualified Stock Option" means any Stock Option that is not an Incentive Stock Option.

"Option" or *"Stock Option"* means any option to purchase shares of Stock granted pursuant to Section 5.

"Registration Date" means the date upon which the registration statement on Form S-1 that is filed by the Company with respect to its initial public offering is declared effective by the U.S. Securities and Exchange Commission.

"Restricted Shares" means the shares of Stock underlying a Restricted Stock Award that remain subject to a risk of forfeiture or the Company's right of repurchase.

"Restricted Stock Award" means an Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"Restricted Stock Units" means an Award of stock units subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"Sale Event" shall mean (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Stock of the Company to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

"*Sale Price*" means the value as determined by the Administrator of the consideration payable, or otherwise to be received by stockholders, per share of Stock pursuant to a Sale Event.

"Section 409A" means Section 409A of the Code and the regulations and other guidance promulgated thereunder.

"Service Relationship" means any relationship as an employee, Non-Employee Director or Consultant of the Company or any Affiliate. Unless as otherwise set forth in the Award Agreement, a Service Relationship shall be deemed to continue without interruption in the event a grantee's status changes from full-time employee to part-time employee or a grantee's status changes from employee to Consultant or Non-Employee Director or vice versa, provided that there is no interruption or other termination of Service Relationship in connection with the grantee's change in capacity.

"Stock" means the Common Stock, par value $0.001 per share, of the Company, subject to adjustments pursuant to Section 3.

"Stock Appreciation Right" means an Award entitling the recipient to receive shares of Stock (or cash, to the extent explicitly provided for in the applicable Award Agreement) having a value equal to the excess of the Fair Market Value of the Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

"Subsidiary" means any corporation or other entity (other than the Company) in which the Company has at least a 50 percent interest, either directly or indirectly.

"*Substitute Awards*" means Awards granted or Stock issued by the Company in assumption of, or in substitution or exchange for, awards previously granted, in each case by a company acquired by the Company or any Affiliate or with which the Company or any Affiliate combines.

"Ten Percent Owner" means an employee who owns or is deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10 percent of the combined voting power of all classes of stock of the Company or any parent or subsidiary corporation.

"Unrestricted Stock Award" means an Award of shares of Stock free of any restrictions.

SECTION 2. ADMINISTRATION OF PLAN; ADMINISTRATOR AUTHORITY TO SELECT GRANTEES AND DETERMINE AWARDS

(a) Administration of Plan. The Plan shall be administered by the Administrator.

(b) Powers of Administrator. The Administrator shall have the power and authority to grant Awards consistent with the terms of the Plan, including the power and authority:

(i) to select the individuals to whom Awards may from time to time be granted;

(ii) to determine the time or times of grant, and the extent, if any, of Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Awards, Restricted Stock Units, Unrestricted Stock Awards, Cash-Based Awards, and Dividend Equivalent Rights, or any combination of the foregoing, granted to any one or more grantees;

(iii) to determine the number of shares of Stock to be covered by any Award;

(iv) to determine and modify from time to time the terms and conditions, including restrictions, not inconsistent with the terms of the Plan, of any Award, which terms and conditions may differ among individual Awards and grantees, and to approve the forms of Award Agreements;

(v) to accelerate at any time the exercisability or vesting of all or any portion of any Award;

(vi) subject to the provisions of Section 5(c) or 6(d), to extend at any time the period in which Stock Options or Stock Appreciation Rights, respectively, may be exercised; and

(vii) at any time to adopt, alter and repeal such rules, guidelines and practices for administration of the Plan and for its own acts and proceedings as it shall deem advisable; to interpret the terms and provisions of the Plan and any Award (including related written instruments); to make all determinations it deems advisable for the administration of the Plan; to decide all disputes arising in connection with the Plan; and to otherwise supervise the administration of the Plan.

All decisions and interpretations of the Administrator shall be binding on all persons, including the Company and Plan grantees.

(c) Delegation of Authority to Grant Awards. Subject to applicable law, the Administrator, in its discretion, may delegate to a committee consisting of one or more officers of the Company, including the Chief Executive Officer of the Company, all or part of the Administrator's authority and duties with respect to the granting of Awards to individuals who are (i) not subject to the reporting and other provisions of Section 16 of the Exchange Act and (ii) not members of the delegated committee. Any such delegation by the Administrator shall include a limitation as to the amount of Stock underlying Awards that may be granted during the period of the delegation and shall contain guidelines as to the determination of the exercise price and the vesting criteria. The Administrator may revoke or amend the terms of a delegation at any time but such action shall not invalidate any prior actions of the Administrator's delegate or delegates that were consistent with the terms of the Plan.

(d) Award Agreement. Awards under the Plan shall be evidenced by Award Agreements that set forth the terms, conditions and limitations for each Award which may include, without limitation, the term of an Award and the provisions applicable in the event the Service Relationship terminates.

(e) Indemnification. Neither the Board nor the Administrator, nor any member of either or any delegate thereof, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan, and the members of the Board and the Administrator (and any delegate thereof) shall be entitled in all cases to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including, without limitation, reasonable attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under the Company's articles or bylaws or any directors' and officers' liability insurance coverage which may be in effect from time to time and/or any indemnification agreement between such individual and the Company.

(f) Non-U.S. Award Recipients. Notwithstanding any provision of the Plan to the contrary, in order to comply with the laws in other countries in which the Company and its Affiliates operate or have employees or other individuals eligible for Awards, the Administrator, in its sole discretion, shall have the power and authority to: (i) determine which Affiliates shall be covered by the Plan; (ii) determine which individuals outside the United States are eligible to participate in the Plan; (iii) modify the terms and conditions of any Award granted to individuals outside the United States to comply with applicable laws; (iv) establish subplans and modify exercise procedures and other terms and procedures, to the extent the Administrator determines such actions to be necessary or advisable (and such subplans and/or modifications shall be incorporated into and made part of this Plan); provided, however, that no such subplans and/or modifications shall increase the share limitations contained in Section 3(a) hereof; and (v) take any action, before or after an Award is made, that the Administrator determines to be necessary or advisable to obtain approval or comply with any local governmental regulatory exemptions or approvals. Notwithstanding the foregoing, the Administrator may not take any actions hereunder, and no Awards shall be granted, that would violate the Exchange Act or any other applicable United States securities law, the Code, or any other applicable United States governing statute or law.

SECTION 3. STOCK ISSUABLE UNDER THE PLAN; MERGERS; SUBSTITUTION

(a) Stock Issuable. The maximum number of shares of Stock reserved and available for issuance under the Plan shall be 3,690,000 shares (the "Initial Limit"), plus on January 1, 2025 and on each January 1 thereafter, the number of shares of Stock reserved and available for issuance under the Plan shall automatically be cumulatively increased by 5% of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31, or such lesser number of shares as approved by the Administrator, in all cases subject to adjustment as provided in Section 3(c) (the "Annual Increase"). Subject to such overall limitation, the maximum aggregate number of shares of Stock that may be issued in the form of Incentive Stock Options shall not

exceed the Initial Limit cumulatively increased on January 1, 2025 and on each January 1 thereafter by the lesser of the Annual Increase for such year or 3,690,000 shares of Stock, subject in all cases to adjustment as provided in Section 3(c). For purposes of this limitation, the shares of Stock underlying any awards under the Plan and the shares of Common Stock of the Company underlying any awards under the Company's 2021 Stock Option and Grant Plan, as amended from time to time, that are forfeited, canceled, held back upon exercise of an option or settlement of an award to cover the exercise price or tax withholding, reacquired by the Company prior to vesting, satisfied without the issuance of Stock or otherwise terminated (other than by exercise) shall be added back to the shares of Stock available for issuance under the Plan and, to the extent permitted under Section 422 of the Code and the regulations promulgated thereunder, the shares of Stock that may be issued as Incentive Stock Options. In the event the Company repurchases shares of Stock on the open market, such shares shall not be added to the shares of Stock available for issuance under the Plan. Subject to such overall limitations, shares of Stock may be issued up to such maximum number pursuant to any type or types of Award. The shares available for issuance under the Plan may be authorized but unissued shares of Stock or shares of Stock reacquired by the Company. Awards that may be settled solely in cash shall not be counted against the share reserve, nor shall they reduce the shares of Stock authorized for grant to a grantee in any calendar year.

(b) Maximum Awards to Non-Employee Directors. Notwithstanding anything to the contrary in this Plan, the aggregate value of all Awards awarded under this Plan and all other cash compensation paid by the Company to any Non-Employee Director for services as a Non-Employee Director in any calendar year shall not exceed $750,000; provided, however, that in the first calendar year in which an individual becomes a Non-Employee Director, the aggregate value of all Awards awarded under this Plan and all other cash compensation paid by the Company to such Non-Employee Director for services as a Non-Employee Director shall not exceed $1,000,000. For the purpose of this limitation, the value of any Award shall be its grant date fair value, as determined in accordance with ASC Topic 718 or successor provision but excluding the impact of estimated forfeitures related to service-based vesting provisions.

(c) Changes in Stock. Subject to Section 3(d) hereof, if, as a result of any reorganization, recapitalization, reclassification, stock dividend, extraordinary cash dividend, stock split, reverse stock split or other similar change in the Company's capital stock, the outstanding shares of Stock are increased or decreased or are exchanged for a different number or kind of shares or other securities of the Company, or additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Stock or other securities, or, if, as a result of any merger or consolidation, sale of all or substantially all of the assets of the Company, the outstanding shares of Stock are converted into or exchanged for securities of the Company or any successor entity (or a parent or subsidiary thereof), the Administrator shall make an appropriate or proportionate adjustment in (i) the maximum number of shares reserved for issuance under the Plan, including the maximum number of shares that may be issued in the form of Incentive Stock Options, (ii) the number and kind of shares or other securities subject to any then outstanding Awards under the Plan, (iii) the repurchase price, if any, per share subject to each outstanding Restricted Stock Award, and (iv) the exercise price for each share subject to any then outstanding Stock Options and Stock Appreciation Rights under the Plan, without changing the aggregate exercise price (i.e., the exercise price multiplied by the number of shares subject to Stock Options and Stock Appreciation Rights) as to

which such Stock Options and Stock Appreciation Rights remain exercisable. The Administrator shall also make equitable or proportionate adjustments in the number of shares subject to outstanding Awards and the exercise price and the terms of outstanding Awards to take into consideration cash dividends paid other than in the ordinary course or any other extraordinary corporate event. The adjustment by the Administrator shall be final, binding and conclusive. No fractional shares of Stock shall be issued under the Plan resulting from any such adjustment, but the Administrator in its discretion may make a cash payment in lieu of fractional shares.

(d) Mergers and Other Transactions. In the case of and subject to the consummation of a Sale Event, the parties thereto may cause the assumption or continuation of Awards theretofore granted by the successor entity, or the substitution of such Awards with new Awards of the successor entity or parent thereof, with appropriate adjustment as to the number and kind of shares and, if appropriate, the per share exercise prices, as such parties shall agree. To the extent that the parties to such Sale Event do not provide for the assumption, continuation or substitution of Awards, upon the effective time of the Sale Event, the Plan and all outstanding Awards granted hereunder shall terminate. In such case, except as may be otherwise provided in the relevant Award Agreement, all Options and Stock Appreciation Rights with time-based vesting conditions or restrictions that are not vested and/or exercisable immediately prior to the effective time of the Sale Event shall become fully vested and exercisable as of the effective time of the Sale Event, all other Awards with time-based vesting, conditions or restrictions shall become fully vested and nonforfeitable as of the effective time of the Sale Event, and all Awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in connection with a Sale Event in the Administrator's discretion or to the extent specified in the relevant Award Agreement. In the event of such termination, (i) the Company shall have the option (in its sole discretion) to make or provide for a payment, in cash or in kind, to the grantees holding Options and Stock Appreciation Rights, in exchange for the cancellation thereof, in an amount equal to the difference between (A) the Sale Price multiplied by the number of shares of Stock subject to outstanding Options and Stock Appreciation Rights (to the extent then exercisable at prices not in excess of the Sale Price) and (B) the aggregate exercise price of all such outstanding Options and Stock Appreciation Rights (provided that, in the case of an Option or Stock Appreciation Right with an exercise price equal to or greater than the Sale Price, such Option or Stock Appreciation Right shall be cancelled for no consideration); or (ii) each grantee shall be permitted, within a specified period of time prior to the consummation of the Sale Event as determined by the Administrator, to exercise all outstanding Options and Stock Appreciation Rights (to the extent then exercisable) held by such grantee. The Company shall also have the option (in its sole discretion) to make or provide for a payment, in cash or in kind, to the grantees holding other Awards in an amount equal to the Sale Price multiplied by the number of vested shares of Stock under such Awards.

(e) Substitute Awards. Substitute Awards shall not reduce the shares of Stock authorized for grant under the Plan, nor shall shares subject to a Substitute Award be added to the shares of Stock available for Awards under the Plan as provided in Section 3(a) above. Additionally, in the event that a company acquired by the Company or any Affiliate or with which the Company or any Affiliate combines has shares available under a pre-existing plan approved by stockholders and not adopted in contemplation of such acquisition or combination, the shares available for grant pursuant to the terms of such pre-existing plan (as adjusted, to the extent appropriate, using the exchange ratio or other adjustment or valuation ratio or formula used in such

acquisition or combination to determine the consideration payable to the holders of common stock of the entities party to such acquisition or combination) may be used for Awards under the Plan and shall not reduce the shares authorized for grant under the Plan (and shares subject to such Awards shall not be added to the shares available for Awards under the Plan as provided in Section 3(a) above); provided that Awards using such available shares shall not be made after the date awards or grants could have been made under the terms of the pre-existing plan, absent the acquisition or combination, and shall only be made to individuals who were not employees or directors prior to such acquisition or combination.

SECTION 4. ELIGIBILITY

Grantees under the Plan will be such employees, Non-Employee Directors or Consultants of the Company and its Affiliates as are selected from time to time by the Administrator in its sole discretion; provided that Awards may not be granted to employees, Non-Employee Directors or Consultants who are providing services only to any "parent" of the Company, as such term is defined in Rule 405 of the Act, unless (i) the stock underlying the Awards is treated as "service recipient stock" under Section 409A or (ii) the Company has determined that such Awards are exempt from or otherwise comply with Section 409A.

SECTION 5. STOCK OPTIONS

(a) Award of Stock Options. The Administrator may grant Stock Options under the Plan. Any Stock Option granted under the Plan shall be in such form as the Administrator may from time to time approve.

Stock Options granted under the Plan may be either Incentive Stock Options or Non-Qualified Stock Options. Incentive Stock Options may be granted only to employees of the Company or any Subsidiary that is a "subsidiary corporation" within the meaning of Section 424(f) of the Code. To the extent that any Option does not qualify as an Incentive Stock Option, it shall be deemed a Non-Qualified Stock Option.

Stock Options granted pursuant to this Section 5 shall be subject to the following terms and conditions and shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as the Administrator shall deem desirable. If the Administrator so determines, Stock Options may be granted in lieu of cash compensation at the optionee's election, subject to such terms and conditions as the Administrator may establish.

(b) Exercise Price. The exercise price per share for the Stock covered by a Stock Option granted pursuant to this Section 5 shall be determined by the Administrator at the time of grant but shall not be less than 100 percent of the Fair Market Value on the date of grant. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the exercise price of such Incentive Stock Option shall be not less than 110 percent of the Fair Market Value on the date of grant. Notwithstanding the foregoing, Stock Options may be granted with an exercise price per share that is less than 100 percent of the Fair Market Value on the date of grant (i) pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code, (ii) to individuals who are not subject to U.S. income tax on the date of grant or (iii) if the Stock Option is otherwise exempt from or compliant with Section 409A.

(c) Option Term. The term of each Stock Option shall be fixed by the Administrator, but no Stock Option shall be exercisable more than ten years after the date the Stock Option is granted. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the term of such Stock Option shall be no more than five years from the date of grant.

(d) Exercisability; Rights of a Stockholder. Stock Options shall become exercisable at such time or times, whether or not in installments, as shall be determined by the Administrator at or after the date of grant. The Administrator may at any time accelerate the exercisability of all or any portion of any Stock Option. An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

(e) Method of Exercise. Stock Options may be exercised in whole or in part, by giving written or electronic notice of exercise to the Company, specifying the number of shares to be purchased. Payment of the purchase price may be made by one or more of the following methods except to the extent otherwise provided in the Award Agreement:

(i) In cash, by certified or bank check or other instrument acceptable to the Administrator;

(ii) Through the delivery (or attestation to the ownership following such procedures as the Company may prescribe) of shares of Stock that are not then subject to restrictions under any Company plan. Such surrendered shares shall be valued at Fair Market Value on the exercise date;

(iii) By the optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price; provided that in the event the optionee chooses to pay the purchase price as so provided, the optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Company shall prescribe as a condition of such payment procedure; or

(iv) With respect to Stock Options that are not Incentive Stock Options, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price.

Payment instruments will be received subject to collection. The transfer to the optionee on the records of the Company or of the transfer agent of the shares of Stock to be purchased pursuant to the exercise of a Stock Option will be contingent upon receipt from the optionee (or a purchaser acting in his stead in accordance with the provisions of the Stock Option) by the Company of the full purchase price for such shares and the fulfillment of any other requirements contained in the Award Agreement or applicable provisions of laws (including the satisfaction of any taxes that the Company or an Affiliate is obligated to withhold with respect to the optionee). In the event an optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the optionee upon the exercise of the Stock Option shall be net of the number of attested shares. In the event that the Company establishes, for itself or using the services of a third party, an automated system for the exercise of Stock Options, such as a system using an internet website or interactive voice response, then the paperless exercise of Stock Options may be permitted through the use of such an automated system.

(f) Annual Limit on Incentive Stock Options. To the extent required for "incentive stock option" treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the shares of Stock with respect to which Incentive Stock Options granted under this Plan and any other plan of the Company or its parent and subsidiary corporations become exercisable for the first time by an optionee during any calendar year shall not exceed $100,000. To the extent that any Stock Option exceeds this limit, it shall constitute a Non-Qualified Stock Option.

SECTION 6. STOCK APPRECIATION RIGHTS

(a) Award of Stock Appreciation Rights. The Administrator may grant Stock Appreciation Rights under the Plan. A Stock Appreciation Right is an Award entitling the recipient to receive shares of Stock (or cash, to the extent explicitly provided for in the applicable Award Agreement) having a value equal to the excess of the Fair Market Value of a share of Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

(b) Exercise Price of Stock Appreciation Rights. The exercise price of a Stock Appreciation Right shall not be less than 100 percent of the Fair Market Value of the Stock on the date of grant. Notwithstanding the foregoing, Stock Appreciation Rights may be granted with an exercise price per share that is less than 100 percent of the Fair Market Value on the date of grant (i) pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code, (ii) to individuals who are not subject to U.S. income tax on the date of grant or (iii) if the Stock Appreciation Right is otherwise exempt from or compliant with Section 409A.

(c) Grant and Exercise of Stock Appreciation Rights. Stock Appreciation Rights may be granted by the Administrator independently of any Stock Option granted pursuant to Section 5 of the Plan.

(d) Terms and Conditions of Stock Appreciation Rights. Stock Appreciation Rights shall be subject to such terms and conditions as shall be determined on the date of grant by the Administrator. The term of a Stock Appreciation Right may not exceed ten years. The terms and conditions of each such Award shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees.

SECTION 7. RESTRICTED STOCK AWARDS

(a) Nature of Restricted Stock Awards. The Administrator may grant Restricted Stock Awards under the Plan. A Restricted Stock Award is any Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant. Conditions may be based on continuing employment (or other Service Relationship) and/or achievement of pre-established performance goals and objectives.

(b) Rights as a Stockholder. Upon the grant of the Restricted Stock Award and payment of any applicable purchase price, a grantee shall have the rights of a stockholder with respect to the voting of the Restricted Shares and receipt of dividends; provided that if the lapse of restrictions with respect to the Restricted Stock Award is tied to the attainment of vesting conditions, any dividends paid by the Company shall accrue and shall not be paid to the grantee until and to the extent the vesting conditions are met with respect to the Restricted Stock Award. Unless the Administrator shall otherwise determine, (i) uncertificated Restricted Shares shall be accompanied by a notation on the records of the Company or the transfer agent to the effect that they are subject to forfeiture until such Restricted Shares are vested as provided in Section 7(d) below, and (ii) certificated Restricted Shares shall remain in the possession of the Company until such Restricted Shares are vested as provided in Section 7(d) below, and the grantee shall be required, as a condition of the grant, to deliver to the Company such instruments of transfer as the Administrator may prescribe.

(c) Restrictions. Restricted Shares may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of except as specifically provided herein or in the Restricted Stock Award Agreement. Except as may otherwise be provided by the Administrator either in the Award Agreement or, subject to Section 16 below, in writing after the Award is issued, if a grantee's employment (or other Service Relationship) with the Company and its Affiliates terminates for any reason, any Restricted Shares that have not vested at the time of termination shall automatically and without any requirement of notice to such grantee from or other action by or on behalf of, the Company be deemed to have been reacquired by the Company at its original purchase price (if any) from such grantee or such grantee's legal representative simultaneously with such termination of employment (or other Service Relationship), and thereafter shall cease to represent any ownership of the Company by the grantee or rights of the grantee as a stockholder. Following such deemed reacquisition of Restricted Shares that are represented by physical certificates, a grantee shall surrender such certificates to the Company upon request without consideration.

(d) Vesting of Restricted Shares. The Administrator at the time of grant shall specify the date or dates and/or the attainment of pre-established performance goals, objectives and other conditions on which the non-transferability of the Restricted Shares and the Company's right of repurchase or forfeiture shall lapse. Subsequent to such date or dates and/or the attainment of such pre-established performance goals, objectives and other conditions, the shares on which all restrictions have lapsed shall no longer be Restricted Shares and shall be deemed "vested."

SECTION 8. RESTRICTED STOCK UNITS

(a) Nature of Restricted Stock Units. The Administrator may grant Restricted Stock Units under the Plan. A Restricted Stock Unit is an Award of stock units that may be settled in shares of Stock (or cash, to the extent explicitly provided for in the Award Agreement) upon the satisfaction of such restrictions and conditions at the time of grant. Conditions may be based on continuing employment (or other Service Relationship) and/or achievement of pre-established performance goals and objectives. The terms and conditions of each such Award shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees. Restricted Stock Units with deferred settlement dates are subject to Section 409A and shall contain such additional terms and conditions as the Administrator shall determine in its sole discretion in order to comply with the requirements of Section 409A.

(b) Election to Receive Restricted Stock Units in Lieu of Compensation. The Administrator may, in its sole discretion, permit a grantee to elect to receive a portion of future cash compensation otherwise due to such grantee in the form of an award of Restricted Stock Units. Any such election shall be made in writing and shall be delivered to the Company no later than the date specified by the Administrator and in accordance with Section 409A and such other rules and procedures established by the Administrator. Any such future cash compensation that the grantee elects to defer shall be converted to a fixed number of Restricted Stock Units based on the Fair Market Value of Stock on the date the compensation would otherwise have been paid to the grantee if such payment had not been deferred as provided herein. The Administrator shall have the sole right to determine whether and under what circumstances to permit such elections and to impose such limitations and other terms and conditions thereon as the Administrator deems appropriate. Any Restricted Stock Units that are elected to be received in lieu of cash compensation shall be fully vested, unless otherwise provided in the Award Agreement.

(c) Rights as a Stockholder. A grantee shall have the rights as a stockholder only as to shares of Stock acquired by the grantee upon settlement of Restricted Stock Units; provided, however, that the grantee may be credited with Dividend Equivalent Rights with respect to the stock units underlying his or her Restricted Stock Units, subject to the provisions of Section 11 and such terms and conditions as the Administrator may determine.

(d) Termination. Except as may otherwise be provided by the Administrator either in the Award Agreement or, subject to Section 16 below, in writing after the Award is issued, a grantee's right in all Restricted Stock Units that have not vested shall automatically terminate upon the grantee's termination of employment (or cessation of Service Relationship) with the Company and its Affiliates for any reason.

SECTION 9. UNRESTRICTED STOCK AWARDS

Grant or Sale of Unrestricted Stock. The Administrator may grant (or sell at par value or such higher purchase price determined by the Administrator) an Unrestricted Stock Award under the Plan. An Unrestricted Stock Award is an Award pursuant to which the grantee may receive shares of Stock free of any restrictions under the Plan. Unrestricted Stock Awards may be granted in respect of past services or other valid consideration, or in lieu of cash compensation due to such grantee.

SECTION 10. CASH-BASED AWARDS

Grant of Cash-Based Awards. The Administrator may grant Cash-Based Awards under the Plan. A Cash-Based Award is an Award that entitles the grantee to a payment in cash upon the attainment of specified performance goals, including continued employment (or other Service Relationship). The Administrator shall determine the maximum duration of the Cash-Based Award, the amount of cash to which the Cash-Based Award pertains, the conditions upon which the Cash-Based Award shall become vested or payable, and such other provisions as the Administrator shall determine. Each Cash-Based Award shall specify a cash-denominated payment amount, formula or payment ranges as determined by the Administrator. Payment, if any, with respect to a Cash-Based Award shall be made in accordance with the terms of the Award and may be made in cash.

SECTION 11. DIVIDEND EQUIVALENT RIGHTS

(a) Dividend Equivalent Rights. The Administrator may grant Dividend Equivalent Rights under the Plan. A Dividend Equivalent Right is an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other Award to which it relates) if such shares had been issued to the grantee. A Dividend Equivalent Right may be granted hereunder to any grantee as a component of an award of Restricted Stock Units or as a freestanding award. The terms and conditions of Dividend Equivalent Rights shall be specified in the Award Agreement. Dividend equivalents credited to the holder of a Dividend Equivalent Right may be paid currently or may be deemed to be reinvested in additional shares of Stock, which may thereafter accrue additional equivalents. Any such reinvestment shall be at Fair Market Value on the date of reinvestment or such other price as may then apply under a dividend reinvestment plan sponsored by the Company, if any. Dividend Equivalent Rights may be settled in cash or shares of Stock or a combination thereof, in a single installment or installments. A Dividend Equivalent Right granted as a component of an Award of Restricted Stock Units shall provide that such Dividend Equivalent Right shall be settled only upon settlement or payment of, or lapse of restrictions on, such other Award, and that such Dividend Equivalent Right shall expire or be forfeited or annulled under the same conditions as such other Award.

(b) Termination. Except as may otherwise be provided by the Administrator either in the Award Agreement or, subject to Section 16 below, in writing after the Award is issued, a grantee's rights in all Dividend Equivalent Rights shall automatically terminate upon the grantee's termination of employment (or cessation of Service Relationship) with the Company and its Affiliates for any reason.

SECTION 12. TRANSFERABILITY OF AWARDS

(a) Transferability. Except as provided in Section 12(b) below or otherwise determined by the Administrator, during a grantee's lifetime, his or her Awards shall be exercisable only by the grantee, or by the grantee's legal representative or guardian in the event of the grantee's incapacity. No Awards shall be sold, assigned, transferred or otherwise encumbered or disposed of by a grantee other than by will or by the laws of descent and distribution or pursuant to a domestic relations order. No Awards shall be subject, in whole or in part, to attachment, execution, or levy of any kind, and any purported transfer in violation hereof shall be null and void.

(b) Administrator Action. Notwithstanding Section 12(a), the Administrator, in its discretion, may provide either in the Award Agreement regarding a given Award or by subsequent written approval that the grantee (who is an employee or Non-Employee Director) may transfer his or her Non-Qualified Stock Options to his or her immediate family members, to trusts for the benefit of such family members, or to partnerships in which such family members are the only partners, provided that the transferee agrees in writing with the Company to be bound by all of the terms and conditions of this Plan and the applicable Award Agreement. In no event may an Award be transferred by a grantee for value.

(c) Family Member. For purposes of Section 12(b), "family member" shall mean a grantee's child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, any person sharing the grantee's household (other than a tenant of the grantee), a trust in which these persons (or the grantee) have more than 50 percent of the beneficial interest, a foundation in which these persons (or the grantee) control the management of assets, and any other entity in which these persons (or the grantee) own more than 50 percent of the voting interests.

(d) Designation of Beneficiary. To the extent permitted by the Company and valid under applicable law, each grantee to whom an Award has been made under the Plan may designate a beneficiary or beneficiaries to exercise any Award or receive any payment under any Award payable on or after the grantee's death. Any such designation shall be on a form provided for that purpose by the Administrator and shall not be effective until received by the Administrator. If no beneficiary has been designated by a deceased grantee, or if the designated beneficiaries have predeceased the grantee, the beneficiary shall be the grantee's estate or legal heirs.

SECTION 13. TAX WITHHOLDING

(a) Payment by Grantee. Each grantee shall, no later than the date as of which the value of an Award or of any Stock or other amounts received thereunder first becomes includable in the gross income of the grantee for tax purposes, pay to the Company or any applicable Affiliate, or make arrangements satisfactory to the Administrator regarding payment of, any U.S. and non-U.S. federal, state, or local taxes of any kind required by law to be withheld by the Company or any applicable Affiliate with respect to such income. The Company and its Affiliates shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the grantee or to satisfy any applicable withholding obligations by any other method of withholding that the Company and its Affiliates deem appropriate. The Company's obligation to deliver evidence of book entry (or stock certificates) to any grantee is subject to and conditioned on tax withholding obligations being satisfied by the grantee.

(b) Payment in Stock. The Administrator may cause any tax withholding obligation of the Company or any applicable Affiliate to be satisfied, in whole or in part, by the Company withholding from shares of Stock to be issued pursuant to any Award a number of shares with an aggregate Fair Market Value (as of the date the withholding is effected) that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory rate or such lesser amount as is necessary to avoid liability accounting treatment. For purposes of share withholding, the Fair Market Value of withheld shares shall be determined in the same manner as the value of Stock includible in income of the grantees. The Administrator may also require any tax withholding obligation of the Company or any applicable Affiliate to be satisfied, in whole or in part, by an arrangement whereby a certain number of shares of Stock issued pursuant to any Award are immediately sold and proceeds from such sale are remitted to the Company or any applicable Affiliate in an amount that would satisfy the withholding amount due.

SECTION 14. SECTION 409A AWARDS

Awards are intended to be exempt from Section 409A to the greatest extent possible and to otherwise comply with Section 409A. The Plan and all Awards shall be interpreted in accordance with such intent. To the extent that any Award is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A (a "409A Award"), the Award shall be subject to such additional rules and requirements as specified by the Administrator from time to time in order to comply with Section 409A. In this regard, if any amount under a 409A Award is payable upon a "separation from service" (within the meaning of Section 409A) to a grantee who is then considered a "specified employee" (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the grantee's separation from service, or (ii) the grantee's death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties and/or additional tax imposed pursuant to Section 409A. Further, the settlement of any 409A Award may not be accelerated except to the extent permitted by Section 409A. The Company makes no representation that any or all of the payments or benefits described in the Plan will be exempt from or comply with Section 409A of the Code and makes no undertaking to preclude Section 409A of the Code from applying to any such payment. The grantee shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

SECTION 15. TERMINATION OF SERVICE RELATIONSHIP, TRANSFER, LEAVE OF ABSENCE, ETC.

(a) Termination of Service Relationship. If the grantee's Service Relationship is with an Affiliate and such Affiliate ceases to be an Affiliate, the grantee shall be deemed to have terminated his or her Service Relationship for purposes of the Plan.

(b) For purposes of the Plan, the following events shall not be deemed a termination of a Service Relationship:

(i) a transfer to the Service Relationship of the Company from an Affiliate or from the Company to an Affiliate, or from one Affiliate to another; or

(ii) an approved leave of absence for military service or sickness, or for any other purpose approved by the Company, if the employee's right to re-employment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise so provides in writing.

SECTION 16. AMENDMENTS AND TERMINATION

The Board may, at any time, amend or discontinue the Plan and the Administrator may, at any time, amend or cancel any outstanding Award for the purpose of satisfying changes in law or for any other lawful purpose, but no such action shall materially and adversely affect rights under any outstanding Award without the holder's consent. The Administrator is specifically authorized to exercise its discretion to reduce the exercise price of outstanding Stock Options or Stock Appreciation Rights, or effect the repricing of such Awards through cancellation and re-grants or cancellation of Stock Options or Stock Appreciation Rights in exchange for cash or other Awards. To the extent required under the rules of any securities exchange or market system on which the

Stock is listed, or to the extent determined by the Administrator to be required by the Code to ensure that Incentive Stock Options granted under the Plan are qualified under Section 422 of the Code, Plan amendments shall be subject to approval by Company stockholders. Nothing in this Section 16 shall limit the Administrator's authority to take any action permitted pursuant to Section 3(c) or 3(d).

SECTION 17. STATUS OF PLAN

With respect to the portion of any Award that has not been exercised and any payments in cash, Stock or other consideration not received by a grantee, a grantee shall have no rights greater than those of a general creditor of the Company unless the Administrator shall otherwise expressly determine in connection with any Award or Awards. In its sole discretion, the Administrator may authorize the creation of trusts or other arrangements to meet the Company's obligations to deliver Stock or make payments with respect to Awards hereunder, provided that the existence of such trusts or other arrangements is consistent with the foregoing sentence.

SECTION 18. GENERAL PROVISIONS

(a) No Distribution. The Administrator may require each person acquiring Stock pursuant to an Award to represent to and agree with the Company in writing that such person is acquiring the shares without a view to distribution thereof.

(b) Issuance of Stock. To the extent certificated, stock certificates to grantees under this Plan shall be deemed delivered for all purposes when the Company or a stock transfer agent of the Company shall have mailed such certificates in the United States mail, addressed to the grantee, at the grantee's last known address on file with the Company. Uncertificated Stock shall be deemed delivered for all purposes when the Company or a Stock transfer agent of the Company shall have given to the grantee by electronic mail (with proof of receipt) or by United States mail, addressed to the grantee, at the grantee's last known address on file with the Company, notice of issuance and recorded the issuance in its records (which may include electronic "book entry" records). Notwithstanding anything herein to the contrary, the Company shall not be required to issue or deliver any evidence of book entry or certificates evidencing shares of Stock pursuant to the exercise or settlement of any Award, unless and until the Administrator has determined, with advice of counsel (to the extent the Administrator deems such advice necessary or advisable), that the issuance and delivery is in compliance with all applicable laws, regulations of governmental authorities and, if applicable, the requirements of any exchange on which the shares of Stock are listed, quoted or traded. Any Stock issued pursuant to the Plan shall be subject to any stop-transfer orders and other restrictions as the Administrator deems necessary or advisable to comply with federal, state or foreign jurisdiction, securities or other laws, rules and quotation system on which the Stock is listed, quoted or traded. The Administrator may place legends on any Stock certificate or notations on any book entry to reference restrictions applicable to the Stock. In addition to the terms and conditions provided herein, the Administrator may require that an individual make such reasonable covenants, agreements, and representations as the Administrator, in its discretion, deems necessary or advisable in order to comply with any such laws, regulations, or requirements. The Administrator shall have the right to require any individual to comply with any timing or other restrictions with respect to the settlement or exercise of any Award, including a window-period limitation, as may be imposed in the discretion of the Administrator.

(c) Stockholder Rights. Until Stock is deemed delivered in accordance with Section 18(b), no right to vote or receive dividends or any other rights of a stockholder will exist with respect to shares of Stock to be issued in connection with an Award, notwithstanding the exercise of a Stock Option or any other action by the grantee with respect to an Award.

(d) Other Incentive Arrangements; No Rights to Continued Service Relationship. Nothing contained in this Plan shall prevent the Board from adopting other or additional incentive arrangements, including trusts, and such arrangements may be either generally applicable or applicable only in specific cases. The adoption of this Plan and the grant of Awards do not confer upon any grantee any right to continued employment or other Service Relationship with the Company or any Affiliate.

(e) Trading Policy Restrictions. Option exercises and other Awards under the Plan shall be subject to the Company's insider trading policies and procedures, as in effect from time to time.

(f) Clawback Policy. Awards under the Plan shall be subject to the Company's clawback policy, as in effect from time to time.

(g) Fractional Shares. No fractional Shares shall be issued or delivered pursuant to the Plan or any Award, and the Administrator shall determine whether cash, other securities or other property shall be paid or transferred in lieu of any fractional Shares, or whether such fractional Shares or any rights thereto shall be cancelled, terminated or otherwise eliminated.

SECTION 19. EFFECTIVE DATE OF PLAN

This Plan shall become effective upon the date immediately preceding the Registration Date subject to prior stockholder approval in accordance with applicable state law, the Company's bylaws and articles of incorporation, and applicable stock exchange rules. No grants of Awards may be made hereunder after the tenth anniversary of the Effective Date and no grants of Incentive Stock Options may be made hereunder after the tenth anniversary of the date the Plan is approved by the Board.

SECTION 20. GOVERNING LAW

This Plan and all Awards and actions taken thereunder shall be governed by, and construed in accordance with, the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of California, applied without regard to conflict of law principles.

DATE APPROVED BY BOARD OF DIRECTORS: OCTOBER 1, 2024

DATE APPROVED BY STOCKHOLDERS: OCTOBER 18, 2024

INCENTIVE STOCK OPTION AGREEMENT
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: $_____
[FMV on Grant Date (110% of FMV if a 10% owner)]

Grant Date: _____

Expiration Date: _____
[up to 10 years (5 if a 10% owner)]

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable as follows: _____, so long as the Optionee continues to have a Service Relationship with the Company or a Subsidiary on such dates.

Incremental Number of Option Shares Exercisable*	Exercisability Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

* Max. of $100,000 per yr.

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; or (iv) a combination of (i), (ii) and (iii) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the shares of Stock attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Service Relationship. If the Optionee's Service Relationship with the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of twelve (12) months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination, may thereafter be exercised by the Optionee for a period of twelve (12) months from the date the Optionee's Service Relationship is terminated by reason of the Optionee's disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of the termination of the Optionee's Service Relationship by reason of the Optionee's disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment or service agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for any reason other than the Optionee's death, the Optionee's disability, or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three (3) months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's Service Relationship with the Company or a Subsidiary shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Status of the Stock Option. This Stock Option is intended to qualify as an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), but the Company does not represent or warrant that this Stock Option qualifies as such. The Optionee should consult with his or her own tax advisors regarding the tax effects of this Stock Option and the requirements necessary to obtain favorable income tax treatment under Section 422 of the Code, including, but not limited to, holding period requirements and that ***this Stock Option must be exercised within three (3) months after termination of employment as an employee (or twelve (12) months in the case of death or disability) to qualify as an "incentive stock option"***. To the extent any portion of this Stock Option does not so qualify as an "incentive stock option," such portion shall be deemed to be a non-qualified stock option. If the Optionee intends to dispose or does dispose (whether by sale, gift, transfer or otherwise) of any Option Shares within the one-year period beginning on the date after the transfer of such shares to him or her, or within the two-year period beginning on the day after the grant of this Stock Option, he or she will so notify the Company within 30 days after such disposition.

7. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by (i) withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; or (ii) causing its transfer agent to sell from the number of shares of Stock to be issued to the Optionee, the number of shares of Stock necessary to satisfy the Federal, state and local taxes required by law to be withheld from the Optionee on account of such transfer.

8. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Optionee's Service Relationship with the Company or a Subsidiary at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

12. [Clawback Acknowledgement. The Optionee acknowledges that the Optionee may become subject to the Septerna, Inc. Compensation Recovery Policy adopted pursuant to Rule 10D-1 promulgated under the Exchange Act and Nasdaq Rule 5608, or any successor rule (the "Clawback Policy"). The Optionee understands that if the Optionee is or becomes subject to the Clawback Policy, the Company and/or the Board shall be entitled to recover all Erroneously Awarded Compensation (as defined in the Clawback Policy) from the Optionee pursuant to such means as the Company and/or the Board may elect. The Optionee agrees that the Optionee shall take all required action to enable such recovery. The Optionee understands that such recovery may be sought and occur after the Optionee's employment or service with the Company terminates. The Optionee further agrees that the Optionee is not entitled to indemnification for any Erroneously Awarded Compensation or for any claim or losses arising out of or in any way related to Erroneously Awarded Compensation recovered pursuant to the Clawback Policy and, to the extent any agreement or organizational document purports to provide otherwise, the Optionee hereby irrevocably agrees to forego such indemnification. The Optionee acknowledges and agrees that the Optionee has received and has had an opportunity to review the Clawback Policy. Any action by the Company to recover Erroneously Awarded Compensation under the Clawback Policy from the Optionee shall not, whether alone or in combination with any other action, event or condition, be deemed (i) an event giving rise to a right to resign for a Good Reason (as defined in the Septerna, Inc. Executive Severance Plan) or serve as a basis for a claim of constructive termination under any benefits or compensation arrangement applicable to the Optionee, or (ii) to constitute a breach of a contract or other arrangement to which the Optionee is a party. This Section 12 is a material term of this Agreement.][1]

[1] For Section 16 officers only.

Septerna, Inc.

By: _____
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR COMPANY NON-EMPLOYEE DIRECTORS
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: $_____
[FMV on Grant Date]

Grant Date: _____

Expiration Date: _____
[No more than 10 years]

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants to the Optionee named above, who is a Non-Employee Director of the Company but is not an employee of the Company, an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable as follows: _____, so long as the Optionee continues to have a Service Relationship on such dates.

Incremental Number of Option Shares Exercisable	Exercisability Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Notwithstanding the foregoing, in the event of a Sale Event, 100% of the then-outstanding and unvested Option Shares shall immediately be deemed vested and exercisable on the date of such Sale Event; provided, that the Optionee continues to have a Service Relationship until the date of such Sale Event. Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Service Relationship. If the Optionee's Service Relationship with the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below..

(a) Termination Due to Death. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of twelve (12) months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination, may thereafter be exercised by the Optionee for a period of twelve (12) months from the date the Optionee's Service Relationship is terminated by reason of the Optionee's disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of the termination of the Optionee's Service Relationship by reason of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment or other service agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for any reason other than the Optionee's death, the Optionee's disability or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three (3) months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's Service Relationship with the Company or a Subsidiary shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Optionee's Service Relationship with the Company or a Subsidiary at any time.

7. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

8. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

9. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

Septerna, Inc.

By: _____
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: $_____
[FMV on Grant Date]

Grant Date: _____

Expiration Date: _____

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.001 per share (the "Stock") of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable as follows: _____, so long as Optionee continues to have a Service Relationship with the Company or a Subsidiary on such dates.

Incremental Number of Option Shares Exercisable	Exercisability Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the shares of Stock attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a

holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Service Relationship. If the Optionee's Service Relationship with the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of twelve (12) months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination, may thereafter be exercised by the Optionee for a period of twelve (12) months from the date the Optionee's Service Relationship is terminated by reason of the Optionee's disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of the termination of the Optionee's Service Relationship by reason of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment or other service agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for any reason other than the Optionee's death, the Optionee's disability or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three (3) months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's Service Relationship with the Company or a Subsidiary shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by (i) withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; or (ii) causing its transfer agent to sell from the number of shares of Stock to be issued to the Optionee, the number of shares of Stock necessary to satisfy the Federal, state and local taxes required by law to be withheld from the Optionee on account of such transfer.

7. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Optionee's Service Relationship with the Company or a Subsidiary at any time.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to, Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information").

By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

11. [Clawback Acknowledgement. The Optionee acknowledges that the Optionee may become subject to the Septerna, Inc. Compensation Recovery Policy adopted pursuant to Rule 10D-1 promulgated under the Exchange Act and Nasdaq Rule 5608, or any successor rule (the "Clawback Policy"). The Optionee understands that if the Optionee is or becomes subject to the Clawback Policy, the Company and/or the Board shall be entitled to recover all Erroneously Awarded Compensation (as defined in the Clawback Policy) from the Optionee pursuant to such means as the Company and/or the Board may elect. The Optionee agrees that the Optionee shall take all required action to enable such recovery. The Optionee understands that such recovery may be sought and occur after the Optionee's employment or service with the Company terminates. The Optionee further agrees that the Optionee is not entitled to indemnification for any Erroneously Awarded Compensation or for any claim or losses arising out of or in any way related to Erroneously Awarded Compensation recovered pursuant to the Clawback Policy and, to the extent any agreement or organizational document purports to provide otherwise, the Optionee hereby irrevocably agrees to forego such indemnification. The Optionee acknowledges and agrees that the Optionee has received and has had an opportunity to review the Clawback Policy. Any action by the Company to recover Erroneously Awarded Compensation under the Clawback Policy from the Optionee shall not, whether alone or in combination with any other action, event or condition, be deemed (i) an event giving rise to a right to resign for a Good Reason (as defined in the Septerna, Inc. Executive Severance Plan) or serve as a basis for a claim of constructive termination under any benefits or compensation arrangement applicable to the Optionee, or (ii) to constitute a breach of a contract or other arrangement to which the Optionee is a party. This Section 11 is a material term of this Agreement.][1]

Septerna, Inc.

By: _____

Title:

[1] For Section 16 officers only.

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR COMPANY CONSULTANTS
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: $_____
[FMV on Grant Date]

Grant Date: _____

Expiration Date: _____
[No more than 10 years]

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants to the Optionee named above, who is a Consultant of the Company, an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable as follows: _____, so long as the Optionee continues to have a Service Relationship with the Company or a Subsidiary on such dates.

Incremental Number of Option Shares Exercisable	Exercisability Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a

holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Service Relationship. Except as may otherwise be provided by the Administrator, if the Optionee's Service Relationship with the Company or a Subsidiary is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of twelve (12) months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's Service Relationship with the Company or a Subsidiary terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination, may thereafter be exercised by the Optionee for a period of twelve (12) months from the date the Optionee's Service Relationship is terminated by reason of the Optionee's disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of the termination of the Optionee's Service Relationship by reason of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment or other service agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's Service Relationship with the Company or a Subsidiary terminates for any reason other than the Optionee's death, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three (3) months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date the Optionee ceases to be a Consultant shall terminate immediately and be of no further force or effect.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Optionee's Service Relationship with the Company or a Subsidiary at any time.

7. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

8. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

9. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

Septerna, Inc.

By: _____
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Optionee's Signature

Optionee's name and address:

_____

_____

_____

RESTRICTED STOCK AWARD AGREEMENT
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____

No. of Shares: _____

Grant Date: _____

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan (the "Plan") as amended through the date hereof, Septerna, Inc. (the "Company") hereby grants a Restricted Stock Award (an "Award") to the Grantee named above. Upon acceptance of this Award, the Grantee shall receive the number of shares of Common Stock, par value $0.001 per share (the "Stock") of the Company specified above, subject to the restrictions and conditions set forth herein and in the Plan. The Company acknowledges the receipt from the Grantee of consideration with respect to the par value of the Stock in the form of cash, past or future services rendered to the Company by the Grantee or such other form of consideration as is acceptable to the Administrator.

1. Award. The shares of Restricted Stock awarded hereunder shall be issued and held by the Company's transfer agent in book entry form, and the Grantee's name shall be entered as the stockholder of record on the books of the Company. Thereupon, the Grantee shall have all the rights of a stockholder with respect to such shares, including voting and dividend rights, subject, however, to the restrictions and conditions specified in Paragraph 2 below. The Grantee shall (i) sign and deliver to the Company a copy of this Award Agreement and (ii) deliver to the Company a stock power endorsed in blank.

2. Restrictions and Conditions.

(a) Any book entries for the shares of Restricted Stock granted herein shall bear an appropriate legend, as determined by the Administrator in its sole discretion, to the effect that such shares are subject to restrictions as set forth herein and in the Plan.

(b) Shares of Restricted Stock granted herein may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of by the Grantee prior to vesting.

(c) If the Grantee's Service Relationship with the Company or a Subsidiary is voluntarily or involuntarily terminated for any reason (including due to death or disability) prior to vesting of shares of Restricted Stock granted herein, all shares of Restricted Stock shall immediately and automatically be forfeited and returned to the Company.

3. Vesting of Restricted Stock. The restrictions and conditions in Paragraph 2 of this Agreement shall lapse as follows: _____ (each such date, a "Vesting Date"), so long as the Grantee continues to have a Service Relationship with the Company or a Subsidiary on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 2 shall lapse only with respect to the number of shares of Restricted Stock specified as vested on such date.

Incremental Number of Shares Vested	Vesting Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Subsequent to such Vesting Date or Dates, the shares of Stock on which all restrictions and conditions have lapsed shall no longer be deemed Restricted Stock. The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 3.

4. Dividends. Dividends on shares of Restricted Stock shall be paid currently to the Grantee.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Award shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Transferability. This Agreement is personal to the Grantee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution.

7. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state and local taxes required by law to be withheld on account of such taxable event. Except in the case where an election is made pursuant to Paragraph 8 below, the Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by (i) withholding from shares of Stock to be issued or released by the transfer agent a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; or (ii) causing its transfer agent to sell from the number of shares of Stock to be issued or released to the Grantee, the number of shares of Stock necessary to satisfy the Federal, state and local taxes required by law to be withheld from the Grantee on account of such transfer.

8. Election Under Section 83(b). The Grantee and the Company hereby agree that the Grantee may, within 30 days following the Grant Date of this Award, file with the Internal Revenue Service and the Company an election under Section 83(b) of the Internal Revenue Code. In the event the Grantee makes such an election, he or she agrees to provide a copy of the

election to the Company. The Grantee acknowledges that he or she is responsible for obtaining the advice of his or her tax advisors with regard to the Section 83(b) election and that he or she is relying solely on such advisors and not on any statements or representations of the Company or any of its agents with regard to such election.

9. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Grantee's Service Relationship with the Company or a Subsidiary at any time.

10. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

11. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to, Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

12. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

13. [Clawback Acknowledgement. The Grantee acknowledges that the Grantee may become subject to the Septerna, Inc. Compensation Recovery Policy adopted pursuant to Rule 10D-1 promulgated under the Exchange Act and Nasdaq Rule 5608, or any successor rule (the "Clawback Policy"). The Grantee understands that if the Grantee is or becomes subject to the Clawback Policy, the Company and/or the Board shall be entitled to recover all Erroneously Awarded Compensation (as defined in the Clawback Policy) from the Grantee pursuant to such means as the Company and/or the Board may elect. The Grantee agrees that the Grantee shall take all required action to enable such recovery. The Grantee understands that such recovery may be sought and occur after the Grantee's employment or service with the Company terminates. The Grantee further agrees that the Grantee is not entitled to indemnification for any Erroneously Awarded Compensation or for any claim or losses arising out of or in any way related to Erroneously Awarded Compensation recovered pursuant to the Clawback Policy and, to the

extent any agreement or organizational document purports to provide otherwise, the Grantee hereby irrevocably agrees to forego such indemnification. The Grantee acknowledges and agrees that the Grantee has received and has had an opportunity to review the Clawback Policy. Any action by the Company to recover Erroneously Awarded Compensation under the Clawback Policy from the Grantee shall not, whether alone or in combination with any other action, event or condition, be deemed (i) an event giving rise to a right to resign for a Good Reason (as defined in the Septerna, Inc. Executive Severance Plan) or serve as a basis for a claim of constructive termination under any benefits or compensation arrangement applicable to the Grantee, or (ii) to constitute a breach of a contract or other arrangement to which the Grantee is a party. This Section 13 is a material term of this Agreement.][1]

Septerna, Inc.

By: _____

Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Grantee's Signature

Grantee's name and address:

_____

_____

_____

[1] For Section 16 officers only.

RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR NON-EMPLOYEE DIRECTORS
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____

No. of Restricted Stock Units: _____

Grant Date: _____

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value $0.001 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse as follows: _____ (each such date, a "Vesting Date"), so long as the Grantee continues to have a Service Relationship on such Vesting Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

Incremental Number of Restricted Stock Units Vested	Vesting Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Notwithstanding the foregoing, in the event of a Sale Event, 100% of the then-outstanding and unvested Restricted Stock Units shall immediately be deemed vested on the date of such Sale Event; provided, that the Grantee continues to have a Service Relationship until the date of such Sale Event. The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Service as a Non-Employee Director. If the Grantee's Service Relationship terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as "short-term deferrals" as described in Section 409A of the Code.

7. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Grantee's Service Relationship with the Company or a Subsidiary at any time.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to, Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

Septerna, Inc.

By: _____
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Grantee's Signature

Grantee's name and address:

_____

_____

_____

RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE SEPTERNA, INC.
2024 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____

No. of Restricted Stock Units: _____

Grant Date: _____

Pursuant to the Septerna, Inc. 2024 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), Septerna, Inc. (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value $0.001 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse as follows: _____ (each such date, a "Vesting Date"), so long as the Grantee continues to have a Service Relationship with the Company or a Subsidiary on such Vesting Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

Incremental Number of Restricted Stock Units Vested	Vesting Date
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Service Relationship. If the Grantee's Service Relationship with the Company or a Subsidiary terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns, or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by (i) withholding from shares of Stock to be issued to the Grantee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; or (ii) causing its transfer agent to sell from the number of shares of Stock to be issued to the Grantee, the number of shares of Stock necessary to satisfy the Federal, state and local taxes required by law to be withheld from the Grantee on account of such transfer.

7. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as "short-term deferrals" as described in Section 409A of the Code.

8. No Obligation to Continue Service Relationship. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in a Service Relationship with the Company or a Subsidiary and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the Grantee's Service Relationship with the Company or a Subsidiary at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to, Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

12. [Clawback Acknowledgement. The Grantee acknowledges that the Grantee may become subject to the Septerna, Inc. Compensation Recovery Policy adopted pursuant to Rule 10D-1 promulgated under the Exchange Act and Nasdaq Rule 5608, or any successor rule (the "Clawback Policy"). The Grantee understands that if the Grantee is or becomes subject to the Clawback Policy, the Company and/or the Board shall be entitled to recover all Erroneously Awarded Compensation (as defined in the Clawback Policy) from the Grantee pursuant to such means as the Company and/or the Board may elect. The Grantee agrees that the Grantee shall take all required action to enable such recovery. The Grantee understands that such recovery may be sought and occur after the Grantee's employment or service with the Company terminates. The Grantee further agrees that the Grantee is not entitled to indemnification for any Erroneously Awarded Compensation or for any claim or losses arising out of or in any way related to Erroneously Awarded Compensation recovered pursuant to the Clawback Policy and, to the extent any agreement or organizational document purports to provide otherwise, the Grantee hereby irrevocably agrees to forego such indemnification. The Grantee acknowledges and agrees that the Grantee has received and has had an opportunity to review the Clawback Policy. Any action by the Company to recover Erroneously Awarded Compensation under the Clawback Policy from the Grantee shall not, whether alone or in combination with any other action, event or condition, be deemed (i) an event giving rise to a right to resign for a Good Reason (as defined in the Septerna, Inc. Executive Severance Plan) or serve as a basis for a claim of constructive termination under any benefits or compensation arrangement applicable to the Grantee, or (ii) to constitute a breach of a contract or other arrangement to which the Grantee is a party. This Section 12 is a material term of this Agreement.][1]

Septerna, Inc.

By: _____
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Grantee's Signature

Grantee's name and address:

_____

_____

_____

[1] For Section 16 officers only.

SEPTERNA, INC.
2024 EMPLOYEE STOCK PURCHASE PLAN

The purpose of the Septerna, Inc. 2024 Employee Stock Purchase Plan (the "Plan") is to provide eligible employees of Septerna, Inc. (the "Company") and each Designated Company (as defined in Section 11) with opportunities to purchase shares of the Company's common stock, par value $0.001 per share (the "Common Stock"). 369,402 shares of Common Stock in the aggregate have been approved and reserved for this purpose, plus on January 1, 2026 and each January 1 thereafter until the Plan terminates pursuant to Section 20, the number of shares of Common Stock reserved and available for issuance under the Plan shall automatically be cumulatively increased by the least of (i) 369,402 shares of Common Stock, (ii) 1% of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31, and (iii) such number of shares of Common Stock as determined by the Administrator (as defined in Section 1).

The Plan includes two components: a Code Section 423 Component (the "423 Component") and a non-Code Section 423 Component (the "Non-423 Component"). It is intended for the 423 Component to constitute an "employee stock purchase plan" within the meaning of Section 423(b) of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), and the 423 Component shall be interpreted in accordance with that intent. Under the Non-423 Component, which does not qualify as an "employee stock purchase plan" within the meaning of Section 423(b) of the Code, options will be granted pursuant to rules, procedures or sub-plans adopted by the Administrator designed to comply with applicable laws to achieve tax and other objectives for eligible employees. Except as otherwise provided herein or by the Administrator, the Non-423 Component will operate and be administered in the same manner as the 423 Component. Unless otherwise defined herein, capitalized terms in this Plan shall have the meaning ascribed to them in Section 11.

1. Administration. The Plan will be administered by the person or persons (the "Administrator") appointed by the Company's Board of Directors (the "Board") for such purpose. The Administrator has authority at any time to: (i) adopt, alter and repeal such rules, guidelines and practices for the administration of the Plan and for its own acts and proceedings as it shall deem advisable; (ii) interpret the terms and provisions of the Plan; (iii) make all determinations it deems advisable for the administration of the Plan, including to accommodate the specific requirements of applicable laws, regulations and procedures for jurisdictions outside the United States; (iv) decide all disputes arising in connection with the Plan; and (v) otherwise supervise the administration of the Plan. All interpretations and decisions of the Administrator shall be binding on all persons, including the Company and the Participants. No member of the Board or individual exercising administrative authority with respect to the Plan shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder.

2. Offerings. The Company will make one or more offerings to eligible employees to purchase Common Stock under the Plan ("Offerings") consisting of one or more Purchase Periods. The Administrator may, in its discretion, determine when each Offering shall occur, including the duration of any Offering; provided that no Offering shall exceed 27 months in duration. Unless as otherwise determined by the Administrator, Participants will only be permitted to participate in one Offering at a time. Unless the Administrator, in its sole discretion, chooses otherwise prior to

an Offering Date, and to the extent an Offering has more than one Purchase Period and to the extent permitted by applicable law, if the Fair Market Value of the Common Stock on any Exercise Date in an Offering is lower than the Fair Market Value of the Common Stock on the Offering Date, then all participants in such Offering automatically will be withdrawn from such Offering immediately after the exercise of their option on such Exercise Date and automatically re-enrolled in the immediately following Offering as of the first day thereof and the preceding Offering will terminate.

3. Eligibility. All individuals classified as employees on the payroll records of the Company and each Designated Company are eligible to participate in any one or more of the Offerings under the Plan, provided that, unless otherwise determined by the Administrator, as of the first day of the applicable Offering (the "Offering Date") they are customarily employed by the Company or a Designated Company for more than 20 hours a week and have been employed for such period as determined by the Administrator in advance of the Offering, with such period not to exceed two years; provided, however, that employees who are employed for 20 hours or less a week may be eligible to participate in the Plan if required by applicable law or regulations. Notwithstanding any other provision herein, individuals who are not contemporaneously classified as employees of the Company or a Designated Company for purposes of the Company's or applicable Designated Company's payroll system are not considered to be eligible employees of the Company or any Designated Company and shall not be eligible to participate in the Plan. In the event any such individuals are reclassified as employees of the Company or a Designated Company for any purpose, including, without limitation, common law or statutory employees, by any action of any third party, including, without limitation, any government agency, or as a result of any private lawsuit, action or administrative proceeding, such individuals shall, notwithstanding such reclassification, remain ineligible for participation. Notwithstanding the foregoing, the exclusive means for individuals who are not contemporaneously classified as employees of the Company or a Designated Company on the Company's or Designated Company's payroll system to become eligible to participate in this Plan is through an amendment or subplan to this Plan, duly executed by the Company, which specifically renders such individuals eligible to participate herein.

4. Participation.

(a) Participants in Offerings. An eligible employee who is not a Participant in any prior Offering may participate in a subsequent Offering by submitting an enrollment form to the Company or an agent designated by the Company (in the manner described in Section 4(b)) at least 15 business days before the Offering Date (or by such other deadline as shall be established by the Administrator for the Offering).

(b) Enrollment. The enrollment form (which may be in an electronic format or such other method as determined by the Company in accordance with the Company's practices) will (i) state a whole percentage to be deducted from an eligible employee's Compensation (as defined in Section 11) per pay period, (ii) authorize the purchase of Common Stock in each Offering in accordance with the terms of the Plan and (iii) specify the exact name or names in which shares of Common Stock purchased for such individual are to be issued pursuant to Section 10. An employee who does not enroll in accordance with these procedures will be deemed to have waived the right to participate. Unless a Participant files a new enrollment form or withdraws from the Plan, such Participant's deductions or contributions and purchases will continue at the same percentage of Compensation for future Offerings, provided he or she remains eligible.

(c) Notwithstanding the foregoing, participation in the Plan will neither be permitted nor be denied contrary to the requirements of the Code.

5. Employee Contributions. Each eligible employee may authorize payroll deductions or contributions at a minimum of one percent (1%) up to a maximum of fifteen percent (15%) of such employee's Compensation for each pay period or such other maximum as may be specified by the Administrator in advance of an Offering. The Company will maintain book accounts showing the amount of payroll deductions or contributions made by each Participant for each Purchase Period. No interest will accrue or be paid on payroll deductions or contributions, except as may be required by applicable law. If payroll deductions or contributions for purposes of the Plan are prohibited or otherwise problematic under applicable law (as determined by the Administrator in its discretion), the Administrator may require Participants to contribute to the Plan by such other means as determined by the Administrator. Any reference to "payroll deductions" or contributions in this Section 5 (or in any other section of the Plan) will similarly cover contributions by other means made pursuant to this Section 5.

6. Deduction Changes. Except as may be determined by the Administrator in advance of an Offering, a Participant may not increase his or her payroll deduction or contributions during any Offering and may only decrease his or her payroll deduction or contribution once during an Offering. However, during an Offering, a Participant may increase or decrease his or her payroll deduction or contributions with respect to the next Offering (subject to the limitations of Section 5) by filing a new enrollment form at least 15 business days before the next Offering Date (or by such other deadline as shall be established by the Administrator for the Offering). The Administrator may, in advance of any Offering, establish rules permitting a Participant to increase, decrease or terminate his or her payroll deduction or contributions during an Offering.

7. Withdrawal. A Participant may withdraw from participation in the Plan by delivering a written notice of withdrawal to the Company or an agent designated by the Company (in accordance with such procedures as may be established by the Administrator). The Participant's withdrawal will be effective as of the next business day. Following a Participant's withdrawal, the Company will promptly refund such individual's entire account balance under the Plan to him or her (after payment for any Common Stock purchased before the effective date of withdrawal). Partial withdrawals are not permitted. Such an employee may not begin participation again during the remainder of the Offering, but may enroll in a subsequent Offering in accordance with Section 4.

8. Grant of Options. On each Offering Date, the Company will grant to each eligible employee who is then a Participant in the Plan an option ("Option") to purchase on the last day of a Purchase Period (the "Exercise Date") and at the Option Price hereinafter provided for, the lowest of (a) a number of shares of Common Stock determined by dividing such Participant's accumulated payroll deductions or contributions on such Exercise Date by the Option Price (as

defined herein), (b) the number of shares of Common Stock determined by dividing $25,000 by the Fair Market Value (as defined in Section 11) of the Common Stock on the Offering Date for such Offering; or (c) such other maximum number of shares as shall have been established by the Administrator in advance of the Offering; provided, however, that such Option shall be subject to the limitations set forth below. Each Participant's Option shall be exercisable only to the extent of such Participant's accumulated payroll deductions on the Exercise Date. The purchase price for each share purchased under each Option (the "Option Price") will be eighty-five percent (85%) of the Fair Market Value of the Common Stock on the Offering Date or the Exercise Date, whichever is less.

Notwithstanding the foregoing, no Participant may be granted an Option hereunder if such Participant, immediately after the Option was granted, would be treated as owning stock possessing 5 percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or any Parent or Subsidiary (as defined in Section 11). For purposes of the preceding sentence, the attribution rules of Section 424(d) of the Code shall apply in determining the stock ownership of a Participant, and all stock which the Participant has a contractual right to purchase shall be treated as stock owned by the Participant. In addition, no Participant may be granted an Option which permits his or her rights to purchase stock under the Plan, and any other employee stock purchase plan of the Company and its Parents and Subsidiaries, to accrue at a rate which exceeds $25,000 of the Fair Market Value of such stock (determined on the option grant date or dates) for each calendar year in which the Option is outstanding at any time. The purpose of the limitation in the preceding sentence is to comply with Section 423(b)(8) of the Code and shall be applied taking Options into account in the order in which they were granted.

9. Exercise of Option and Purchase of Shares. Each employee who continues to be a Participant in the Plan on the Exercise Date shall be deemed to have exercised his or her Option on such date and shall acquire from the Company such number of whole shares of Common Stock reserved for the purpose of the Plan as his or her accumulated payroll deductions or contributions on such date will purchase at the Option Price, subject to any other limitations contained in the Plan. Unless otherwise determined by the Administrator in advance of an Offering, any amount remaining in a Participant's account after the purchase of shares on an Exercise Date of an Offering solely by reason of the inability to purchase a fractional share will be carried forward to the next Purchase Period, and if such Exercise Date is the final Exercise Date of an Offering, will be carried forward to the next Offering; any other balance remaining in a Participant's account at the end of an Offering will be refunded to the Participant promptly.

10. Issuance of Certificates. Certificates or book-entries at the Company's transfer agent representing shares of Common Stock purchased under the Plan may be issued only in the name of the employee, in the name of the employee and another person of legal age as joint tenants with rights of survivorship or in the name of a broker authorized by the employee to be his, her or their nominee for such purpose.

11. Definitions.

The term "Affiliate" means any entity that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under the common control with, the Company.

The term “Compensation” means the amount of base pay, prior to salary reduction pursuant to Sections 125, 132(f) or 401(k) of the Code, but excluding overtime, commissions, incentive or bonus awards allowances and reimbursements for expenses such as relocation allowances or travel expenses, income or gains related to options or other share-based awards, and similar items. The Administrator shall have the discretion to determine the application of this definition to Participants outside the United States.

The term “Designated Company” means any present or future Subsidiary or Affiliate that has been designated by the Administrator to participate in the Plan. The Administrator may so designate any Subsidiary or Affiliate, or revoke any such designation, at any time and from time to time, either before or after the Plan is approved by the stockholders, and may further designate such companies or Participants as participating in the 423 Component or the Non-423 Component. The Administrator may also determine which Affiliates or eligible employees may be excluded from participation in the Plan, to the extent consistent with Section 423 of the Code or as implemented under the Non-423 Component, and determine which Designated Company or Companies will participate in separate Offerings (to the extent that the Company makes separate Offerings). For purposes of the 423 Component, only the Company and its Subsidiaries may be Designated Companies; provided, however, that at any given time, a Subsidiary that is a Designated Company under the 423 Component will not be a Designated Company under the Non-423 Component. The current list of Designated Companies is attached hereto as Appendix A.

The term “Fair Market Value of the Common Stock” on any given date means the fair market value of the Common Stock determined in good faith by the Administrator; provided, however, that if the Common Stock is admitted to quotation on the National Association of Securities Dealers Automated Quotation System (“Nasdaq”), Nasdaq Global Market or another national securities exchange, the determination shall be made by reference to the closing price. If there is no closing price for such date, the determination shall be made by reference to the last date preceding such date for which there is a closing price.

The term “Initial Public Offering” means the first underwritten, firm commitment public offering pursuant to an effective registration statement under the U.S. Securities Act of 1933, as amended, covering the offer and sale by the Company of its Common Stock.

The term “New Exercise Date” means a new Exercise Date if the Administrator shortens any Offering then in progress.

The term “Parent” means a “parent corporation” with respect to the Company, as defined in Section 424(e) of the Code.

The term “Participant” means an individual who is eligible as determined in Section 3 and who has complied with the provisions of Section 4.

The term “Purchase Period” means a period of time specified within an Offering beginning on the Offering Date or on the next day following an Exercise Date within an Offering and ending on an Exercise Date. An Offering may consist of one or more Purchase Periods.

The term "Registration Date" means the date on which the registration statement on Form S-1 that is filed by the Company with respect to its Initial Public Offering is declared effective by the U.S. Securities and Exchange Commission (the "SEC").

The term "Sale Event" means (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization, consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Common Stock to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

The term "Subsidiary" means a "subsidiary corporation" with respect to the Company, as defined in Section 424(f) of the Code.

12. Rights on Termination or Transfer of Employment. If a Participant's employment terminates for any reason before the Exercise Date for any Offering, no payroll deduction or contributions will be taken from any pay due and owing to the Participant and the balance in the Participant's account will be paid to such Participant or, in the case of such Participant's death, if permitted by the Administrator and valid under applicable law, to his or her designated beneficiary or to the legal representative of his or her estate as if such Participant had withdrawn from the Plan under Section 7. An employee will be deemed to have terminated employment, for this purpose, if the corporation that employs him or her, having been a Designated Company, ceases to be a Subsidiary or Affiliate, or if the employee is transferred to any corporation other than the Company or a Designated Company. Unless otherwise determined by the Administrator, a Participant whose employment transfers between, or whose employment terminates with an immediate rehire (with no break in service) by, Designated Companies or a Designated Company and the Company will not be treated as having terminated employment for purposes of participating in the Plan or an Offering; provided, however, that if a Participant transfers from an Offering under the 423 Component to an Offering under the Non-423 Component, the exercise of the Participant's Option will be qualified under the 423 Component only to the extent that such exercise complies with Section 423 of the Code. If a Participant transfers from an Offering under the Non-423 Component to an Offering under the 423 Component, the exercise of the Participant's Option will remain non-qualified under the Non-423 Component. Further, an employee will not be deemed to have terminated employment for purposes of this Section 12 if the employee is on an approved leave of absence for military service or sickness or for any other purpose approved by the Company, if the employee's right to reemployment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise provides in writing.

13. Special Rules and Sub-Plans. Notwithstanding anything herein to the contrary, the Administrator may adopt special rules or sub-plans applicable to the employees of a particular Designated Company, whenever the Administrator determines that such rules are necessary or appropriate for the implementation of the Plan in a jurisdiction where such Designated Company has employees, regarding, without limitation, eligibility to participate in the Plan, handling and making of payroll deductions or contributions by other means, establishment of bank or trust accounts to hold payroll deductions or contributions, payment of interest, conversion of local currency, obligation to pay payroll tax, withholding procedures and handling of share issuances, any of which may vary according to applicable requirements; provided that if such special rules or sub-plans are inconsistent with the requirements of Section 423(b) of the Code, the employees subject to such special rules or sub-plans will participate in the Non-423 Component.

14. Optionees Not Stockholders. Neither the granting of an Option to a Participant nor the deductions or contributions from his or her pay shall result in such Participant becoming a holder of the shares of Common Stock covered by an Option under the Plan until such shares have been purchased by and issued to him or her.

15. Rights Not Transferable. Rights under the Plan are not transferable by a Participant other than by will or the laws of descent and distribution, and are exercisable during the Participant's lifetime only by the Participant.

16. Application of Funds. All funds received or held by the Company under the Plan may be combined with other corporate funds and may be used for any corporate purpose, unless otherwise required under applicable law.

17. Adjustment in Case of Changes Affecting Common Stock. In the event of a subdivision of outstanding shares of Common Stock, the payment of a dividend in Common Stock or any other change affecting the Common Stock, the number of shares approved for the Plan and the share limitation set forth in Section 8 shall be equitably or proportionately adjusted to give proper effect to such event. In the case of and subject to the consummation of a Sale Event, the Administrator, in its discretion, and on such terms and conditions as it deems appropriate, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to prevent the dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to any right under the Plan or to facilitate such transactions or events:

(a) To provide for either (i) termination of any outstanding Option in exchange for an amount of cash, if any, equal to the amount that would have been obtained upon the exercise of such Option had such Option been currently exercisable or (ii) the replacement of such outstanding Option with other options or property selected by the Administrator in its sole discretion.

(b) To provide that the outstanding Options under the Plan shall be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for similar options covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and prices.

(c) To make adjustments in the number and type of shares of Common Stock (or other securities or property) subject to outstanding Options under the Plan and/or in the terms and conditions of outstanding Options and Options that may be granted in the future.

(d) To provide that the Offering with respect to which an Option relates will be shortened by setting a New Exercise Date on which such Offering will end. The New Exercise Date will occur before the date of the Sale Event. The Administrator will notify each Participant in writing or electronically prior to the New Exercise Date, that the Exercise Date for the Participant's Option has been changed to the New Exercise Date and that the Participant's Option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant has withdrawn from the Offering as provided in Section 7 hereof.

(e) To provide that all outstanding Options shall terminate without being exercised and all amounts in the accounts of Participants shall be promptly refunded.

18. Amendment of the Plan. The Board may at any time and from time to time amend the Plan in any respect, except that without the approval within 12 months of such Board action by the stockholders, no amendment shall be made increasing the number of shares approved for the Plan or making any other change that would require stockholder approval in order for the 423 Component of the Plan, as amended, to qualify as an "employee stock purchase plan" under Section 423(b) of the Code.

19. Insufficient Shares. If the total number of shares of Common Stock that would otherwise be purchased on any Exercise Date plus the number of shares purchased under previous Offerings under the Plan exceeds the maximum number of shares issuable under the Plan, the shares then available shall be apportioned among Participants in proportion to the amount of payroll deductions or contributions accumulated on behalf of each Participant that would otherwise be used to purchase Common Stock on such Exercise Date.

20. Termination of the Plan. The Plan may be terminated at any time by the Board. Upon termination of the Plan, all amounts in the accounts of Participants shall be promptly refunded. Unless terminated earlier, the Plan shall expire on the ten-year anniversary of the Effective Date.

21. Governmental Regulations. The Company's obligation to sell and deliver Common Stock under the Plan is subject to applicable laws and the completion of any registration or qualification of the Common Stock under any U.S. or non-U.S. local, state or federal securities or exchange control law, or under rulings or regulations of the SEC or of any other governmental regulatory body, and to obtaining any approval or other clearance from any U.S. and non-U.S. local, state or federal governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. The Company is under no obligation to register or qualify the Common Stock with the SEC or any other U.S. or non-U.S. securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of such stock.

22. Governing Law. This Plan and all Options and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of California applied without regard to conflict of law principles.

23. Issuance of Shares. Shares may be issued upon exercise of an Option from authorized but unissued Common Stock, from shares held in the treasury of the Company or from any other proper source.

24. Tax Withholding. Participation in the Plan is subject to any applicable U.S. and non-U.S. federal, state or local tax withholding requirements on income the Participant realizes in connection with the Plan. Each Participant agrees, by entering the Plan, that the Company or any Subsidiary or Affiliate may, but will not be obligated to, withhold from a Participant's wages, salary or other compensation at any time the amount necessary for the Company or any Subsidiary or Affiliate to meet applicable withholding obligations, including any withholding required to make available to the Company or any Subsidiary or Affiliate any tax deductions or benefits attributable to the sale or disposition of Common Stock by such Participant. In addition, the Company or any Subsidiary or Affiliate may, but will not be obligated to, withhold from the proceeds of the sale of Common Stock or use any other method of withholding that the Company or any Subsidiary or Affiliate deems appropriate to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f) with respect to the 423 Component. The Company will not be required to issue any Common Stock under the Plan until such obligations are satisfied.

25. Notification Upon Sale of Shares Under the 423 Component. Each Participant agrees, by entering the 423 Component of the Plan, to give the Company prompt notice of any disposition of shares purchased under the Plan where such disposition occurs within two years after the date of grant of the Option pursuant to which such shares were purchased or within one year after the date such shares were purchased.

26. Effective Date and Approval of Stockholders. The Plan shall take effect on the date immediately preceding the Registration Date, subject to approval by the holders of a majority of the votes cast at a meeting of stockholders at which a quorum is present or by written consent of the stockholders.

DATE APPROVED BY BOARD OF DIRECTORS: OCTOBER 1, 2024

DATE APPROVED BY STOCKHOLDERS: OCTOBER 18, 2024

APPENDIX A
Designated Companies

None

SEPTERNA, INC.
FORM OF NON-EMPLOYEE DIRECTOR
INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("**Agreement**") is made as of [•], by and between Septerna, Inc., a Delaware corporation (the "**Company**"), and [Name] ("**Indemnitee**").

RECITALS

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve the Company;

WHEREAS, in order to induce Indemnitee to provide or continue to provide services to the Company, the Company wishes to provide for the indemnification of, and advancement of expenses to, Indemnitee to the maximum extent permitted by law;

WHEREAS, the Amended and Restated Certificate of Incorporation (as amended and in effect from time to time, the "**Charter**") and the Amended and Restated Bylaws (as amended and in effect from time to time, the "**Bylaws**") of the Company require indemnification of the officers and directors of the Company, and Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware (the "**DGCL**");

WHEREAS, the Charter, the Bylaws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the board of directors, officers and other persons with respect to indemnification;

WHEREAS, the Board of Directors of the Company (the "**Board**") has determined that the increased difficulty in attracting and retaining highly qualified persons such as Indemnitee is detrimental to the best interests of the Company's stockholders;

WHEREAS, it is reasonable and prudent for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law, regardless of any amendment or revocation of the Charter or the Bylaws, so that they will [continue to] serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the indemnification provided in the Charter, the Bylaws and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

[WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by [Affiliated Entity] ("**[Affiliated Entity]**") which Indemnitee and [Affiliated Entity] intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided in this Agreement, with the Company's acknowledgment and agreement to the foregoing being a material condition to Indemnitee's willingness to [continue to] serve on the Board.][1]

[1] This recital should be included if the director is affiliated with a fund or other entity that provides indemnification to the director that is intended to backstop the indemnification provided by the Company.

NOW, THEREFORE, in consideration of the premises and the covenants contained herein, the Company and Indemnitee do hereby covenant and agree as follows:

Section 1. Services to the Company. Indemnitee agrees to [continue to] serve as a director of the Company. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee.

Section 2. Definitions.

As used in this Agreement:

(a) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), as in effect on the date of this Agreement; provided, however, that no Person who is a director or officer of the Company shall be deemed an Affiliate or an Associate of any other director or officer of the Company solely as a result of his or her position as director or officer of the Company.

(b) A Person shall be deemed the "Beneficial Owner" of, and shall be deemed to "Beneficially Own" and have "Beneficial Ownership" of, any securities:

(i) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, Beneficially Owns (as determined pursuant to Rule 13d-3 of the Rules under the Exchange Act, as in effect on the date of this Agreement);

(ii) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, has: (A) the legal, equitable or contractual right or obligation to acquire (whether directly or indirectly and whether exercisable immediately or only after the passage of time, compliance with regulatory requirements, satisfaction of one or more conditions (whether or not within the control of such Person) or otherwise) upon the exercise of any conversion rights, exchange rights, rights, warrants or options, or otherwise; (B) the right to vote pursuant to any agreement, arrangement or understanding (whether or not in writing); or (C) the right to dispose of pursuant to any agreement, arrangement or understanding (whether or not in writing) (other than customary arrangements with and between underwriters and selling group members with respect to a *bona fid*e public offering of securities);

(iii) which are Beneficially Owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person or any of such Person's Affiliates or Associates has any agreement, arrangement or understanding (whether or not in writing) (other than customary agreements with and between underwriters and selling group members with respect to a *bona fide* public offering of securities) for the purpose of acquiring, holding, voting or disposing of any securities of the Company; or

(iv) that are the subject of a derivative transaction entered into by such Person or any of such Person's Affiliates or Associates, including, for these purposes, any derivative security acquired by such Person or any of such Person's Affiliates or Associates that gives such Person or any of such Person's Affiliates or Associates the economic equivalent of ownership of an amount of securities due to the fact that the value of the derivative security is explicitly determined by reference to the price or value of such securities, or that provides such Person or any of such Person's Affiliates or Associates an opportunity, directly or indirectly, to profit or to share in any profit derived from any change in the value of such securities, in any case without regard to whether (A) such derivative security conveys any voting rights in such securities to such Person or any of such Person's Affiliates or Associates; (B) the derivative security is required to be, or capable of being, settled through delivery of such securities; or (C) such Person or any of such Person's Affiliates or Associates may have entered into other transactions that hedge the economic effect of such derivative security;

Notwithstanding the foregoing, no Person engaged in business as an underwriter of securities shall be deemed the Beneficial Owner of any securities acquired through such Person's participation as an underwriter in good faith in a firm commitment underwriting.

(c) A "Change in Control" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) Acquisition of Stock by Third Party. Any Person is or becomes the Beneficial Owner (as defined above), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities unless the change in relative Beneficial Ownership of the Company's securities by any Person results solely from a reduction in the aggregate number of outstanding shares of securities entitled to vote generally in the election of directors, provided that a Change of Control shall be deemed to have occurred if subsequent to such reduction such Person becomes the Beneficial Owner, directly or indirectly, of any additional securities of the Company conferring upon such Person any additional voting power;

(ii) Change in Board of Directors. During any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a Person who has entered into an agreement with the Company to effect a transaction described in Sections 2(c)(i), 2(c)(iii) or 2(c)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Board;

(iii) Corporate Transactions. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving or successor entity) more than 50% of the combined voting power of the voting securities of the surviving or successor entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving or successor entity;

(iv) Liquidation. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale, lease, exchange or other transfer by the Company, in one or a series of related transactions, of all or substantially all of the Company's assets; and

(v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act whether or not the Company is then subject to such reporting requirement.

(d) "Corporate Status" describes the status of a person as a current or former director of the Company or current or former director, manager, partner, officer, employee, agent or trustee of any other Enterprise which such person is or was serving at the request of the Company.

(e) "Enforcement Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with an action to enforce indemnification or advancement rights, or an appeal from such action. Expenses, however, shall not include fees, salaries, wages or benefits owed to Indemnitee.

(f) "Enterprise" shall mean any corporation (other than the Company), partnership, joint venture, trust, employee benefit plan, limited liability company, or other legal entity of which Indemnitee is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee.

(g) "Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding or an appeal resulting from a Proceeding. Expenses, however, shall not include amounts paid in settlement by Indemnitee, the amount of judgments or fines against Indemnitee or fees, salaries, wages or benefits owed to Indemnitee.

(h) "Independent Counsel" means a law firm, or a partner (or, if applicable, member or shareholder) of such a law firm, that is experienced in matters of Delaware corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company, any subsidiary of the Company, any Enterprise or Indemnitee in any matter material to any such party; or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any Person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(i) "Person" shall mean (i) an individual, a corporation, a partnership, a limited liability company, an association, a joint stock company, a trust, a business trust, a government or political subdivision, any unincorporated organization or any other association or entity including any successor (by merger or otherwise) thereof or thereto, and (ii) a "group" as that term is used for purposes of Section 13(d)(3) of the Exchange Act.

(j) The term "Proceeding" shall include any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative, regulatory or investigative nature, and whether formal or informal, in which Indemnitee was, is or will be involved as a party or otherwise by reason of the fact that Indemnitee is or was a director of the Company or is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise or by reason of any action taken by Indemnitee or of any action taken on his or her part while acting as a director of the Company or while serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement; provided, however, that the term "Proceeding" shall not include any action, suit or arbitration, or part thereof, initiated by Indemnitee to enforce Indemnitee's rights under this Agreement as provided for in Section 12(a) of this Agreement.

Section 3. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee to the extent set forth in this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified against all Expenses, judgments, fines, penalties, excise taxes and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

Section 4. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee to the extent set forth in this Section 4 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 4, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 4 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery (the "**Delaware Court**") shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court shall deem proper.

Section 5. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provisions of this Agreement and except as provided in Section 7, to the extent that Indemnitee is a party to or a participant in any Proceeding and is successful in such Proceeding or in defense of any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section 5 and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

Section 6. Reimbursement for Expenses of a Witness or in Response to a Subpoena. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee, by reason of his or her Corporate Status, (i) is a witness in any Proceeding to which Indemnitee is not a party and is not threatened to be made a party or (ii) receives a subpoena with respect to any Proceeding to which Indemnitee is not a party and is not threatened to be made a party, the Company shall reimburse Indemnitee for all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith.

Section 7. Exclusions. Notwithstanding any provision in this Agreement to the contrary, the Company shall not be obligated under this Agreement:

(a) to indemnify for amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received such amounts under any insurance policy, contract, agreement or otherwise; provided that the foregoing shall not [(i)] apply to any personal or umbrella liability insurance maintained by Indemnitee, [or, (ii) affect the rights of Indemnitee or the Fund Indemnitors as set forth in Section 13(c)];

(b) to indemnify for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act or similar provisions of state statutory law or common law, or from the purchase or sale by Indemnitee of such securities in violation of Section 306 of the Sarbanes-Oxley Act of 2002 ("**SOX**");

(c) to indemnify with respect to any Proceeding, or part thereof, brought by Indemnitee against the Company, any legal entity which it controls, any director or officer thereof or any third party, unless (i) the Board has consented to the initiation of such Proceeding or part thereof and (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law; provided, however, that this Section 7(c) shall not apply to (A) counterclaims or affirmative defenses asserted by Indemnitee in an action brought against Indemnitee or (B) any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought as described in Section 12; or

(d) to provide any indemnification or advancement of expenses that is prohibited by applicable law (as such law exists at the time payment would otherwise be required pursuant to this Agreement).

Section 8. Advancement of Expenses. Subject to Section 9(b), the Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made within thirty (30) days after the receipt by the Company of a statement or statements requesting such advances (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) from time to time, whether prior to or after final disposition of any Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's (i) ability to repay the expenses, (ii) ultimate entitlement to indemnification under the other provisions of this Agreement, and (iii) entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses or covered loss under the provisions of any applicable insurance policy (including, without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)). Indemnitee shall qualify for advances upon the execution and delivery to the Company of this Agreement which shall constitute an undertaking providing that Indemnitee undertakes to the fullest extent required by law to repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. No other form of undertaking shall be required. The right to advances under this paragraph shall in all events continue until final disposition of any Proceeding, including any appeal therein. Nothing in this Section 8 shall limit Indemnitee's right to advancement pursuant to Section 12(e) of this Agreement.

Section 9. Procedure for Notification and Defense of Claim.

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request therefor specifying the basis for the claim, the amounts for which Indemnitee is seeking payment under this Agreement, and all documentation related thereto as reasonably requested by the Company.

(b) In the event that the Company shall be obligated hereunder to provide indemnification for or make any advancement of Expenses with respect to any Proceeding, the Company shall be entitled to assume the defense of such Proceeding, or any claim, issue or matter therein, with counsel approved by Indemnitee (which approval shall not be unreasonably withheld or delayed) upon the delivery to Indemnitee of written notice of the Company's election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees or expenses of separate counsel subsequently employed by or on behalf of Indemnitee with respect to the same Proceeding; provided that (i) Indemnitee shall have the right to employ separate counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of separate counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of such defense, (C) the Company shall not continue to retain such counsel to defend such Proceeding or (D) a Change in Control shall have occurred, then the fees and expenses actually and reasonably incurred by Indemnitee with respect to his or her separate counsel shall be Expenses hereunder.

(c) In the event that the Company does not assume the defense in a Proceeding pursuant to paragraph (b) above, then the Company will be entitled to participate in the Proceeding at its own expense.

(d) The Company shall not be liable to indemnify Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding effected without its prior written consent (which consent shall not be unreasonably withheld or delayed). Without limiting the generality of the foregoing, the fact that an insurer under an applicable insurance policy delays or is unwilling to consent to such settlement or is or may be in breach of its obligations under such policy, or the fact that directors' and officers' liability insurance is otherwise unavailable or not maintained by the Company, may not be taken into account by the Company in determining whether to provide its consent. The Company shall not, without the prior written consent of Indemnitee (which consent shall not be unreasonably withheld or delayed), enter into any settlement which (i) includes an admission of fault of Indemnitee, any non-monetary remedy imposed on Indemnitee or any monetary damages for which Indemnitee is not wholly and actually indemnified hereunder or (ii) with respect to any Proceeding with respect to which Indemnitee may be or is made a party or may be otherwise entitled to seek indemnification hereunder, does not include the full release of Indemnitee from all liability in respect of such Proceeding.

Section 10. Procedure Upon Application for Indemnification.

(a) Upon written request by Indemnitee for indemnification pursuant to Section 9(a), a determination, if such determination is required by applicable law, with respect to Indemnitee's entitlement to indemnification hereunder shall be made in the specific case by one of the following methods: (x) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Board; or (y) if a Change in Control shall not have occurred: (i) by a majority vote of the disinterested directors, even though less than a quorum; (ii) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum; or (iii) if there are no disinterested directors or if the

disinterested directors so direct, by Independent Counsel in a written opinion to the Board. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought. In the case that such determination is made by Independent Counsel, a copy of Independent Counsel's written opinion shall be delivered to Indemnitee and, if it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within thirty (30) days after such determination. Indemnitee shall cooperate with the Independent Counsel or the Company, as applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel or the Company, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. The Company shall likewise cooperate with Indemnitee and Independent Counsel, if applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel and Indemnitee, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to the Company and reasonably necessary to such determination. Any out-of-pocket costs or expenses (including reasonable attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the Independent Counsel or the Company shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(b) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(a), the Independent Counsel shall be selected by the Board if a Change in Control shall not have occurred or, if a Change in Control shall have occurred, by Indemnitee. Indemnitee or the Company, as the case may be, may, within ten (10) days after written notice of such selection, deliver to the Company or Indemnitee, as the case may be, a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 2 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the Person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or the Delaware Court has determined that such objection is without merit. If, within twenty (20) days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 9(a), and (ii) the final disposition of the Proceeding, including any appeal therein, no Independent Counsel shall have been selected without objection, either Indemnitee or the Company may petition the Delaware Court for resolution of any objection which shall have been made by Indemnitee or the Company to the selection of Independent Counsel and/or for the appointment as Independent Counsel of a Person selected by the court or by such other Person as the court shall designate. The Person with respect to whom all objections are so resolved or the Person so appointed shall act as Independent Counsel under Section 10(a) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(c) Notwithstanding anything to the contrary contained in this Agreement, the determination of entitlement to indemnification under this Agreement shall be made without regard to the Indemnitee's entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses or covered loss under the provisions of any applicable insurance policy (including, without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)).

Section 11. Presumptions and Effect of Certain Proceedings.

(a) To the extent permitted by applicable law, in making a determination with respect to entitlement to indemnification hereunder, it shall be presumed that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 9(a) of this Agreement, and the Company shall have the burden of proof and the burden of persuasion by clear and convincing evidence to overcome that presumption in connection with the making of any determination contrary to that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of guilty, nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) Indemnitee shall be deemed to have acted in good faith if Indemnitee's actions were based on the records or books of account of the Company or any other Enterprise, including financial statements, or on information supplied to Indemnitee by the directors, officers, agents or employees of the Company or any other Enterprise in the course of their duties, or on the advice of legal counsel for the Company or any other Enterprise or on information or records given or reports made to the Company or any other Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Company or any other Enterprise. The provisions of this Section 11(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement. In addition, the knowledge and/or actions, or failure to act, of any director, manager, partner, officer, employee, agent or trustee of the Company, any subsidiary of the Company, or any Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 11(c) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

Section 12. Remedies of Indemnitee.

(a) Subject to Section 12(f), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10(a) of this Agreement within sixty (60) days after receipt by the Company of the request for indemnification for which a determination is to be made other than by Independent Counsel, (iv) payment of indemnification or reimbursement of expenses is not made pursuant to Section 5 or 6 or the last sentence of Section 10(a) of this Agreement within thirty (30) days after receipt by the Company of a written request therefor (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) or (v) payment of indemnification pursuant to Section 3 or 4 of this Agreement is not made within thirty (30) days after a determination has been made that Indemnitee is entitled to indemnification, Indemnitee shall be entitled to an adjudication by the Delaware Court of his or her entitlement to such indemnification or advancement. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing time limitation shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 5 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event that a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a de novo trial, or arbitration, on the merits and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement, as the case may be.

(c) If a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification or (ii) a prohibition of such indemnification under applicable law.

(d) The Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement.

(e) The Company shall indemnify Indemnitee to the fullest extent permitted by law against any and all Enforcement Expenses and, if requested by Indemnitee, shall (within thirty (30) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such Enforcement Expenses to Indemnitee, which are incurred by

Indemnitee in connection with any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought. Such written request for advancement shall include invoices received by Indemnitee in connection with such Enforcement Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law need not be included with the invoice.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding, including any appeal therein.

Section 13. Non-exclusivity; Survival of Rights; Insurance; [Primacy of Indemnification;] Subrogation.

(a) The rights of indemnification and to receive advancement as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Charter, the Bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement than would be afforded currently under the Charter, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, managers, partners, officers, employees, agents or trustees of the Company or of any other Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, manager, partner, officer, employee, agent or trustee under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of such claim to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies. Upon request of Indemnitee, the Company shall also promptly provide to Indemnitee: (i) copies of all of the Company's potentially applicable directors' and officers' liability insurance policies, (ii) copies of such notices delivered to the applicable insurers and (iii) copies of all subsequent communications and correspondence between the Company and such insurers regarding the Proceeding.

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [Affiliated Entity] and certain of its affiliates (collectively, the "**Fund Indemnitors**"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Charter and/or Bylaws (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 13(c).][2]

(d) [Except as provided in paragraph (c) above,] in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee [(other than against the Fund Indemnitors)], who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) [Except as provided in paragraph (c) above,] the Company's obligation to provide indemnification or advancement hereunder to Indemnitee who is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any other Enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement from such other Enterprise.

Section 14. Duration of Agreement. This Agreement shall continue until and terminate upon the later of: (a) ten (10) years after the date that Indemnitee shall have ceased to serve as a director of the Company or (b) one (1) year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto. This Agreement shall be binding upon the Company and its successors and assigns and shall inure to the benefit of Indemnitee and his or her heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

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2 This provision is intended to be used for directors appointed by investment funds.

Section 15. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

Section 16. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to [continue to] serve as a director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; provided, however, that this Agreement is a supplement to and in furtherance of the Charter, the Bylaws and applicable law, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

Section 17. Modification and Waiver. No supplement, modification or amendment, or waiver of any provision, of this Agreement shall be binding unless executed in writing by the parties thereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement nor shall any waiver constitute a continuing waiver. No supplement, modification or amendment of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee prior to such supplement, modification or amendment.

Section 18. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification, reimbursement or advancement as provided hereunder. The failure of Indemnitee to so notify the Company or any delay in notification shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise, unless, and then only to the extent that, the Company did not otherwise learn of the Proceeding and such delay is materially prejudicial to the Company's ability to defend such Proceeding or matter; and, provided, further, that notice will be deemed to have been given without any action on the part of Indemnitee in the event the Company is a party to the same Proceeding.

Section 19. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed, (iii) mailed by reputable overnight courier and receipted for by the party to whom said notice or other communication shall have been directed or (iv) sent by facsimile transmission, with receipt of oral confirmation that such transmission has been received:

(a) If to Indemnitee, at such address as Indemnitee shall provide to the Company.

(b) If to the Company to:

Septerna, Inc.
250 East Grand Avenue
South San Francisco, California 94080, USA
Attention: Chief Financial Officer

or to any other address as may have been furnished to Indemnitee by the Company.

Section 20. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any Proceeding in such proportion as is deemed fair and reasonable in light of all of the circumstances in order to reflect (i) the relative benefits received by the Company and Indemnitee in connection with the event(s) and/or transaction(s) giving rise to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transactions.

Section 21. Internal Revenue Code Section 409A. The Company intends for this Agreement to comply with the Indemnification exception under Section 1.409A-1(b)(10) of the regulations promulgated under the Internal Revenue Code of 1986, as amended (the "**Code**"), which provides that indemnification of, or the purchase of an insurance policy providing for payments of, all or part of the expenses incurred or damages paid or payable by Indemnitee with respect to a bona fide claim against Indemnitee or the Company do not provide for a deferral of compensation, subject to Section 409A of the Code, where such claim is based on actions or failures to act by Indemnitee in his or her capacity as a service provider of the Company. The parties intend that this Agreement be interpreted and construed with such intent.

Section 22. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) consent to service of process at the address set forth in Section 19 of this Agreement with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

Section 23. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

Section 24. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

Section 25. Monetary Damages Insufficient/Specific Enforcement. The Company and Indemnitee agree that a monetary remedy for breach of this Agreement may be inadequate, impracticable and difficult of proof, and further agree that such breach may cause Indemnitee irreparable harm. Accordingly, the parties hereto agree that Indemnitee may enforce this Agreement by seeking injunctive relief and/or specific performance hereof, without any necessity of showing actual damage or irreparable harm (having agreed that actual and irreparable harm will result in not forcing the Company to specifically perform its obligations pursuant to this Agreement) and that by seeking injunctive relief and/or specific performance, Indemnitee shall not be precluded from seeking or obtaining any other relief to which he may be entitled. The Company and Indemnitee further agree that Indemnitee shall be entitled to such specific performance and injunctive relief, including temporary restraining orders, preliminary injunctions and permanent injunctions, without the necessity of posting bonds or other undertaking in connection therewith. The Company acknowledges that in the absence of a waiver, a bond or undertaking may be required of Indemnitee by the Court, and the Company hereby waives any such requirement of a bond or undertaking.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the day and year first above written.

SEPTERNA, INC.

By: _____
Name:
Title:

_____
[Name]

Exhibit 10.5

SEPTERNA, INC.
FORM OF EMPLOYEE DIRECTOR / OFFICER
INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("**Agreement**") is made as of [•], by and between Septerna, Inc., a Delaware corporation (the "**Company**"), and [Name] ("**Indemnitee**").

RECITALS

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve the Company;

WHEREAS, in order to induce Indemnitee to [continue to] provide services to the Company, the Company wishes to provide for the indemnification of, and advancement of expenses to, Indemnitee to the maximum extent permitted by law;

WHEREAS, the Amended and Restated Certificate of Incorporation (as amended and in effect from time to time, the "**Charter**") and the Amended and Restated Bylaws (as amended and in effect from time to time, the "**Bylaws**") of the Company require indemnification of the officers and directors of the Company, and Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware (the "**DGCL**");

WHEREAS, the Charter, the Bylaws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the board of directors, officers and other persons with respect to indemnification;

WHEREAS, the Board of Directors of the Company (the "**Board**") has determined that the increased difficulty in attracting and retaining highly qualified persons such as Indemnitee is detrimental to the best interests of the Company's stockholders;

WHEREAS, it is reasonable and prudent for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law, regardless of any amendment or revocation of the Charter or the Bylaws, so that they will [continue to] serve the Company free from undue concern that they will not be so indemnified; and

WHEREAS, this Agreement is a supplement to and in furtherance of the indemnification provided in the Charter, the Bylaws and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

NOW, THEREFORE, in consideration of the premises and the covenants contained herein, the Company and Indemnitee do hereby covenant and agree as follows:

Section 1. Services to the Company. Indemnitee agrees to [continue to] serve as [a director and] an officer of the Company. Indemnitee may at any time and for any reason resign from [any] such position (subject to any other contractual obligation or any obligation imposed by law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee.

Section 2. Definitions.

As used in this Agreement:

(a) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), as in effect on the date of this Agreement; provided, however, that no Person who is a director or officer of the Company shall be deemed an Affiliate or an Associate of any other director or officer of the Company solely as a result of his or her position as director or officer of the Company.

(b) A Person shall be deemed the "Beneficial Owner" of, and shall be deemed to "Beneficially Own" and have "Beneficial Ownership" of, any securities:

(i) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, Beneficially Owns (as determined pursuant to Rule 13d-3 of the Rules under the Exchange Act, as in effect on the date of this Agreement);

(ii) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, has: (A) the legal, equitable or contractual right or obligation to acquire (whether directly or indirectly and whether exercisable immediately or only after the passage of time, compliance with regulatory requirements, satisfaction of one or more conditions (whether or not within the control of such Person) or otherwise) upon the exercise of any conversion rights, exchange rights, rights, warrants or options, or otherwise; (B) the right to vote pursuant to any agreement, arrangement or understanding (whether or not in writing); or (C) the right to dispose of pursuant to any agreement, arrangement or understanding (whether or not in writing) (other than customary arrangements with and between underwriters and selling group members with respect to a bona fide public offering of securities);

(iii) which are Beneficially Owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person or any of such Person's Affiliates or Associates has any agreement, arrangement or understanding (whether or not in writing) (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) for the purpose of acquiring, holding, voting or disposing of any securities of the Company; or

(iv) that are the subject of a derivative transaction entered into by such Person or any of such Person's Affiliates or Associates, including, for these purposes, any derivative security acquired by such Person or any of such Person's Affiliates or Associates that gives such Person or any of such Person's Affiliates or Associates the economic equivalent of ownership of an amount of securities due to the fact that the value of the derivative security is explicitly determined by reference to the price or value of such securities, or that provides such Person or

any of such Person's Affiliates or Associates an opportunity, directly or indirectly, to profit or to share in any profit derived from any change in the value of such securities, in any case without regard to whether (A) such derivative security conveys any voting rights in such securities to such Person or any of such Person's Affiliates or Associates; (B) the derivative security is required to be, or capable of being, settled through delivery of such securities; or (C) such Person or any of such Person's Affiliates or Associates may have entered into other transactions that hedge the economic effect of such derivative security.

Notwithstanding the foregoing, no Person engaged in business as an underwriter of securities shall be deemed the Beneficial Owner of any securities acquired through such Person's participation as an underwriter in good faith in a firm commitment underwriting.

(c) A "Change in Control" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) Acquisition of Stock by Third Party. Any Person is or becomes the Beneficial Owner (as defined above), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities unless the change in relative Beneficial Ownership of the Company's securities by any Person results solely from a reduction in the aggregate number of outstanding shares of securities entitled to vote generally in the election of directors, provided that a Change of Control shall be deemed to have occurred if subsequent to such reduction such Person becomes the Beneficial Owner, directly or indirectly, of any additional securities of the Company conferring upon such Person any additional voting power;

(ii) Change in Board of Directors. During any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a Person who has entered into an agreement with the Company to effect a transaction described in Sections 2(c)(i), 2(c)(iii) or 2(c)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Board;

(iii) Corporate Transactions. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving or successor entity) more than 50% of the combined voting power of the voting securities of the surviving or successor entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving or successor entity;

(iv) Liquidation. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale, lease, exchange or other transfer by the Company, in one or a series of related transactions, of all or substantially all of the Company's assets; and

(v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act whether or not the Company is then subject to such reporting requirement.

(d) "Corporate Status" describes the status of a person as a current or former [director or] officer of the Company or current or former director, manager, partner, officer, employee, agent or trustee of any other Enterprise which such person is or was serving at the request of the Company.

(e) "Enforcement Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with an action to enforce indemnification or advancement rights, or an appeal from such action. Expenses, however, shall not include fees, salaries, wages or benefits owed to Indemnitee.

(f) "Enterprise" shall mean any corporation (other than the Company), partnership, joint venture, trust, employee benefit plan, limited liability company, or other legal entity of which Indemnitee is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee.

(g) "Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding or an appeal resulting from a Proceeding. Expenses, however, shall not include amounts paid in settlement by Indemnitee, the amount of judgments or fines against Indemnitee or fees, salaries, wages or benefits owed to Indemnitee.

(h) "Independent Counsel" means a law firm, or a partner (or, if applicable, member or shareholder) of such a law firm, that is experienced in matters of Delaware corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company, any subsidiary of the Company, any Enterprise or Indemnitee in any matter material to any such party; or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any Person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(i) “Person” shall mean (i) an individual, a corporation, a partnership, a limited liability company, an association, a joint stock company, a trust, a business trust, a government or political subdivision, any unincorporated organization or any other association or entity including any successor (by merger or otherwise) thereof or thereto, and (ii) a “group” as that term is used for purposes of Section 13(d)(3) of the Exchange Act.

(j) The term “Proceeding” shall include any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative, regulatory or investigative nature, and whether formal or informal, in which Indemnitee was, is or will be involved as a party or otherwise by reason of the fact that Indemnitee is or was [a director or] an officer of the Company or is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise or by reason of any action taken by Indemnitee or of any action taken on his or her part while acting as [a director or] an officer of the Company or while serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement; provided, however, that the term “Proceeding” shall not include any action, suit or arbitration, or part thereof, initiated by Indemnitee to enforce Indemnitee’s rights under this Agreement as provided for in Section 12(a) of this Agreement.

Section 3. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee to the extent set forth in this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified against all Expenses, judgments, fines, penalties, excise taxes, and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

Section 4. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee to the extent set forth in this Section 4 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 4, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 4 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery (the “**Delaware Court**”) shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court shall deem proper.

Section 5. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provisions of this Agreement and except as provided in Section 7, to the extent that Indemnitee is a party to or a participant in any Proceeding and is successful in such Proceeding or in defense of any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section 5 and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

Section 6. Reimbursement for Expenses of a Witness or in Response to a Subpoena. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee, by reason of his or her Corporate Status, (i) is a witness in any Proceeding to which Indemnitee is not a party and is not threatened to be made a party or (ii) receives a subpoena with respect to any Proceeding to which Indemnitee is not a party and is not threatened to be made a party, the Company shall reimburse Indemnitee for all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith.

Section 7. Exclusions. Notwithstanding any provision in this Agreement to the contrary, the Company shall not be obligated under this Agreement:

(a) to indemnify for amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received such amounts under any insurance policy, contract, agreement or otherwise; provided that the foregoing shall not apply to any personal or umbrella liability insurance maintained by Indemnitee;

(b) to indemnify for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act or similar provisions of state statutory law or common law, or from the purchase or sale by Indemnitee of such securities in violation of Section 306 of the Sarbanes-Oxley Act of 2002 ("**SOX**");

(c) to indemnify for any reimbursement of, or repayment to, the Company by Indemnitee of (i) any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company pursuant to the terms of (A) Section 304 of SOX, (B) Exchange Act Rule 10D-1 or (C) any formal policy of the Company adopted by the Board (or a committee thereof) or (ii) any other remuneration paid to Indemnitee if it shall be determined by a final judgment or other final adjudication that payment of such remuneration was or would have been in violation of law;

(d) to indemnify with respect to any Proceeding, or part thereof, brought by Indemnitee against the Company, any legal entity which it controls, any director or officer thereof or any third party, unless (i) the Board has consented to the initiation of such Proceeding or part thereof and (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law; provided, however, that this Section 7(d) shall not apply to (A) counterclaims or affirmative defenses asserted by Indemnitee in an action brought against Indemnitee or (B) any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought as described in Section 12; or

(e) to provide any indemnification or advancement of expenses that is prohibited by applicable law (as such law exists at the time payment would otherwise be required pursuant to this Agreement).

Section 8. Advancement of Expenses. Subject to Section 9(b), the Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made within thirty (30) days after the receipt by the Company of a statement or statements requesting such advances (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) from time to time, whether prior to or after final disposition of any Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's (i) ability to repay the expenses, (ii) ultimate entitlement to indemnification under the other provisions of this Agreement and (iii) entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses or covered loss under the provisions of any applicable insurance policy (including, without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)). Indemnitee shall qualify for advances upon the execution and delivery to the Company of this Agreement which shall constitute an undertaking providing that Indemnitee undertakes to the fullest extent required by law to repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. No other form of undertaking shall be required. The right to advances under this paragraph shall in all events continue until final disposition of any Proceeding, including any appeal therein. Nothing in this Section 8 shall limit Indemnitee's right to advancement pursuant to Section 12(e) of this Agreement.

Section 9. Procedure for Notification and Defense of Claim.

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request therefor specifying the basis for the claim, the amounts for which Indemnitee is seeking payment under this Agreement, and all documentation related thereto as reasonably requested by the Company.

(b) In the event that the Company shall be obligated hereunder to provide indemnification for or make any advancement of Expenses with respect to any Proceeding, the Company shall be entitled to assume the defense of such Proceeding, or any claim, issue or matter therein, with counsel approved by Indemnitee (which approval shall not be unreasonably withheld or delayed) upon the delivery to Indemnitee of written notice of the Company's election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees or expenses of separate counsel subsequently employed by or on behalf of Indemnitee with respect to the same Proceeding; provided that (i) Indemnitee shall have the right to employ separate counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of separate counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of such defense, (C) the Company shall not continue to retain such counsel to defend such Proceeding, or (D) a Change in Control shall have occurred, then the fees and expenses actually and reasonably incurred by Indemnitee with respect to his or her separate counsel shall be Expenses hereunder.

(c) In the event that the Company does not assume the defense in a Proceeding pursuant to paragraph (b) above, then the Company will be entitled to participate in the Proceeding at its own expense.

(d) The Company shall not be liable to indemnify Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding effected without its prior written consent (which consent shall not be unreasonably withheld or delayed). Without limiting the generality of the foregoing, the fact that an insurer under an applicable insurance policy delays or is unwilling to consent to such settlement or is or may be in breach of its obligations under such policy, or the fact that directors' and officers' liability insurance is otherwise unavailable or not maintained by the Company, may not be taken into account by the Company in determining whether to provide its consent. The Company shall not, without the prior written consent of Indemnitee (which consent shall not be unreasonably withheld or delayed), enter into any settlement which (i) includes an admission of fault of Indemnitee, any non-monetary remedy imposed on Indemnitee or any monetary damages for which Indemnitee is not wholly and actually indemnified hereunder or (ii) with respect to any Proceeding with respect to which Indemnitee may be or is made a party or may be otherwise entitled to seek indemnification hereunder, does not include the full release of Indemnitee from all liability in respect of such Proceeding.

Section 10. Procedure Upon Application for Indemnification.

(a) Upon written request by Indemnitee for indemnification pursuant to Section 9(a), a determination, if such determination is required by applicable law, with respect to Indemnitee's entitlement to indemnification hereunder shall be made in the specific case by one of the following methods: (x) if a Change in Control shall have occurred and indemnification is being requested by Indemnitee hereunder in his or her capacity as a director of the Company, by Independent Counsel in a written opinion to the Board; or (y) in any other case, (i) by a majority vote of the disinterested directors, even though less than a quorum; (ii) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum; or (iii) if there are no disinterested directors or if the disinterested directors so direct, by Independent Counsel in a written opinion to the Board. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or

proceeding in respect of which indemnification is sought. In the case that such determination is made by Independent Counsel, a copy of Independent Counsel's written opinion shall be delivered to Indemnitee and, if it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within thirty (30) days after such determination. Indemnitee shall cooperate with the Independent Counsel or the Company, as applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel or the Company, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. The Company shall likewise cooperate with Indemnitee and Independent Counsel, if applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel and Indemnitee, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to the Company and reasonably necessary to such determination. Any out-of-pocket costs or expenses (including reasonable attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the Independent Counsel or the Company shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(b) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(a), the Independent Counsel shall be selected by the Board; provided that, if a Change in Control shall have occurred and indemnification is being requested by Indemnitee hereunder in his or her capacity as a director of the Company, the Independent Counsel shall be selected by Indemnitee. Indemnitee or the Company, as the case may be, may, within ten (10) days after written notice of such selection, deliver to the Company or Indemnitee, as the case may be, a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 2 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the Person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or the Delaware Court has determined that such objection is without merit. If, within twenty (20) days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 9(a), and (ii) the final disposition of the Proceeding, including any appeal therein, no Independent Counsel shall have been selected without objection, either Indemnitee or the Company may petition the Delaware Court for resolution of any objection which shall have been made by Indemnitee or the Company to the selection of Independent Counsel and/or for the appointment as Independent Counsel of a Person selected by the court or by such other Person as the court shall designate. The Person with respect to whom all objections are so resolved or the Person so appointed shall act as Independent Counsel under Section 10(a) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(c) Notwithstanding anything to the contrary contained in this Agreement, the determination of entitlement to indemnification under this Agreement shall be made without regard to the Indemnitee's entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses or covered loss under the provisions of any applicable insurance policy (including, without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)).

Section 11. Presumptions and Effect of Certain Proceedings.

(a) To the extent permitted by applicable law, in making a determination with respect to entitlement to indemnification hereunder, it shall be presumed that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 9(a) of this Agreement, and the Company shall have the burden of proof and the burden of persuasion by clear and convincing evidence to overcome that presumption in connection with the making of any determination contrary to that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of guilty, nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) Indemnitee shall be deemed to have acted in good faith if Indemnitee's actions were based on the records or books of account of the Company or any other Enterprise, including financial statements, or on information supplied to Indemnitee by the directors, officers, agents or employees of the Company or any other Enterprise in the course of their duties, or on the advice of legal counsel for the Company or any other Enterprise or on information or records given or reports made to the Company or any other Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Company or any other Enterprise. The provisions of this Section 11(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement. In addition, the knowledge and/or actions, or failure to act, of any director, manager, partner, officer, employee, agent or trustee of the Company, any subsidiary of the Company, or any Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 11(c) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

Section 12. Remedies of Indemnitee.

(a) Subject to Section 12(f), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10(a) of this Agreement within sixty (60) days after receipt by the Company of the request for indemnification for which a determination is to be made other than by Independent Counsel, (iv) payment of indemnification or reimbursement of expenses is not made pursuant to Section 5 or 6 or the last sentence of Section 10(a) of this Agreement within thirty (30) days after receipt by the Company of a written request therefor (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) or (v) payment of indemnification pursuant to Section 3 or 4 of this Agreement is not made within thirty (30) days after a determination has been made that Indemnitee is entitled to indemnification, Indemnitee shall be entitled to an adjudication by the Delaware Court of his or her entitlement to such indemnification or advancement. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing time limitation shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 5 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event that a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a de novo trial, or arbitration, on the merits and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement, as the case may be.

(c) If a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification or (ii) a prohibition of such indemnification under applicable law.

(d) The Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement.

(e) The Company shall indemnify Indemnitee to the fullest extent permitted by law against any and all Enforcement Expenses and, if requested by Indemnitee, shall (within thirty (30) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such Enforcement Expenses to Indemnitee, which are incurred by

Indemnitee in connection with any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought. Such written request for advancement shall include invoices received by Indemnitee in connection with such Enforcement Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law need not be included with the invoice.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding, including any appeal therein.

Section 13. Non-exclusivity; Survival of Rights; Insurance; Subrogation.

(a) The rights of indemnification and to receive advancement as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Charter, the Bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement than would be afforded currently under the Charter, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, managers, partners, officers, employees, agents or trustees of the Company or of any other Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, manager, partner, officer, employee, agent or trustee under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of such claim to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies. Upon request of Indemnitee, the Company shall also promptly provide to Indemnitee: (i) copies of all of the Company's potentially applicable directors' and officers' liability insurance policies, (ii) copies of such notices delivered to the applicable insurers, and (iii) copies of all subsequent communications and correspondence between the Company and such insurers regarding the Proceeding.

(c) In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(d) The Company's obligation to provide indemnification or advancement hereunder to Indemnitee who is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any other Enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement from such other Enterprise.

Section 14. Duration of Agreement. This Agreement shall continue until and terminate upon the later of: (a) ten (10) years after the date that Indemnitee shall have ceased to serve as [both a director and] an officer of the Company or (b) one (1) year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto. This Agreement shall be binding upon the Company and its successors and assigns and shall inure to the benefit of Indemnitee and his or her heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

Section 15. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

Section 16. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee [continue to] serve as [a director and] an officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as [a director and] an officer of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; provided, however, that this Agreement is a supplement to and in furtherance of the Charter, the Bylaws and applicable law, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

Section 17. Modification and Waiver. No supplement, modification or amendment, or waiver of any provision, of this Agreement shall be binding unless executed in writing by the parties thereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement nor shall any waiver constitute a continuing waiver. No supplement, modification or amendment of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee prior to such supplement, modification or amendment.

Section 18. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification, reimbursement or advancement as provided hereunder. The failure of Indemnitee to so notify the Company or any delay in notification shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise, unless, and then only to the extent that, the Company did not otherwise learn of the Proceeding and such delay is materially prejudicial to the Company's ability to defend such Proceeding or matter; and, provided, further, that notice will be deemed to have been given without any action on the part of Indemnitee in the event the Company is a party to the same Proceeding.

Section 19. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed, (iii) mailed by reputable overnight courier and receipted for by the party to whom said notice or other communication shall have been directed or (iv) sent by facsimile transmission, with receipt of oral confirmation that such transmission has been received:

(a) If to Indemnitee, at such address as Indemnitee shall provide to the Company.

(b) If to the Company to:

Septerna, Inc.
250 East Grand Avenue
South San Francisco, California 94080, USA
Attention: Chief Financial Officer

or to any other address as may have been furnished to Indemnitee by the Company.

Section 20. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any Proceeding in such proportion as is deemed fair and reasonable in light of all of the circumstances in order to reflect (i) the relative benefits received by the Company and Indemnitee in connection with the event(s) and/or transaction(s) giving rise to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transactions.

Section 21. Internal Revenue Code Section 409A. The Company intends for this Agreement to comply with the Indemnification exception under Section 1.409A-1(b)(10) of the regulations promulgated under the Internal Revenue Code of 1986, as amended (the "**Code**"), which provides that indemnification of, or the purchase of an insurance policy providing for payments of, all or part of the expenses incurred or damages paid or payable by Indemnitee with respect to a bona fide claim against Indemnitee or the Company do not provide for a deferral of compensation, subject to Section 409A of the Code, where such claim is based on actions or failures to act by Indemnitee in his or her capacity as a service provider of the Company. The parties intend that this Agreement be interpreted and construed with such intent.

Section 22. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) consent to service of process at the address set forth in Section 19 of this Agreement with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

Section 23. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

Section 24. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

Section 25. Monetary Damages Insufficient/Specific Enforcement. The Company and Indemnitee agree that a monetary remedy for breach of this Agreement may be inadequate, impracticable and difficult of proof, and further agree that such breach may cause Indemnitee irreparable harm. Accordingly, the parties hereto agree that Indemnitee may enforce this Agreement by seeking injunctive relief and/or specific performance hereof, without any necessity of showing actual damage or irreparable harm (having agreed that actual and irreparable harm will result in not forcing the Company to specifically perform its obligations pursuant to this Agreement) and that by seeking injunctive relief and/or specific performance, Indemnitee shall not be precluded from seeking or obtaining any other relief to which he may be entitled. The Company and Indemnitee further agree that Indemnitee shall be entitled to such specific performance and injunctive relief, including temporary restraining orders, preliminary injunctions and permanent injunctions, without the necessity of posting bonds or other undertakings in connection therewith. The Company acknowledges that in the absence of a waiver, a bond or undertaking may be required of Indemnitee by the Court, and the Company hereby waives any such requirement of a bond or undertaking.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the day and year first above written.

SEPTERNA, INC.

By: _____
Name:
Title:

_____
[Name]

September 9, 2022

Jeffrey Finer

Re: Offer of Employment by Septerna, Inc.

Dear Jeff:

On behalf of Septerna, Inc. (the "Company"), I am pleased to confirm our offer to employ you as Chief Executive Officer ("CEO"). The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As CEO, you will report to the Company's Board of Directors (the "Board"). This is a full-time employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by me. Notwithstanding the foregoing, you may (a) continue to serve as a Venture Partner at Third Rock Ventures, (b) continue to serve on the Board of Directors of Strateos, and as a board observer at Ambys Medicines and Maze Therapeutics and (c) engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on September 13, 2022 unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $475,000.00 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 40% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, the Company and you must achieve applicable performance metrics, to be established and determined by the Board, and you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(c) **Signing Bonus**. Conditioned upon your commencing employment with the Company, you will also be advanced a $100,000 signing bonus, paid on your first scheduled pay date after your Start Date, subject to applicable deductions and withholdings ("Signing Bonus"). Your Signing Bonus is conditioned upon your continued employment with the Company through the one (1) year anniversary of your Start Date, and is not earned until that anniversary date. If your employment with the Company ends prior to the one (1)-year anniversary of your Start Date, you will be responsible for repaying the Signing Bonus, in full, to the Company within ten (10) days of your departure from the Company.

(d) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for similarly situated employees.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. Equity Award. In addition to your existing equity grant(s) ("Existing Award"), subject to the approval of the Board, you will be granted the right to purchase 4,500,000 shares of the Company's Common Stock (the "New Award") as soon as practicable after the Start Date. The New Award will be subject to the terms and conditions applicable to shares granted under the stock option and grant plan in effect at the time of the grant (the "Plan") and the applicable equity award agreement (collectively with the Plan, the "Equity Documents"). You shall vest in the shares subject to the New Award in equal monthly installments over 48 months of continuous service, with your vesting commencement date being August 2, 2022, as described in more detail in the Equity Documents. Your Existing Award shall continue to be governed by the terms and conditions applicable to shares granted under the stock option and grant plan in effect at the time of the grant and the applicable equity award agreement (the "Preserved Agreements").

5. Location. Your primary work location will be at the Company's office, which is currently in South San Francisco, California, *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Board. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that you elect to end your employment the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary and, if applicable, any accrued but unused vacation, through the Date of Termination and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause or you terminate your employment for Good Reason, in either case, outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities, a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations, all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to twelve (12) months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you if you had remained employed by the Company until the earliest of (A) the twelve (12) month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights under COBRA; *provided, however,* that if the Company reasonably determines that it cannot pay such amounts to the group health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over twelve (12) months commencing within 60 days after the Date of Termination; *provided, however,* that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; *provided, further,* that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A- 2(b)(2).

If your employment ends for any reason other than a termination by the Company without Cause you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause or you terminate your employment for Good Reason, in either case, within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8; (ii) provide you the amount of your Target Bonus for the then-current year; and (iii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based ·awards subject to time-based vesting (the "Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (x) _the Date of Termination or (y) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); *provided* that any termination or forfeiture of the unvested portion of such Time- Based Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

10. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 10 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other

party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of non-public information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 10(c).

(d) **Relief** You agree that it would be difficult to measure any damages caused to the Company which might result from your breach-of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

11. Section 409A.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) twelve months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the twelve month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

13. Interpretation and Enforcement. Except for the Preserved Agreements (which shall remain in full force and effect unless otherwise provided herein), this Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

14. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however,* that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; *provided further,* that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

15. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

16. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Conditions. This offer is contingent on the completion of successful reference and background checks, if so requested and as determined by the Company. In addition, all employees must be fully vaccinated against COVID-19 (with the Moderna, Pfizer, or J&J/Janssen vaccine) and submit a certification of same to the Company before your Start Date, unless the Company has approved a reasonable accommodation exempting you from this requirement. Please contact Human Resources if you require such an exemption due to a medical condition or a sincerely held religious belief. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

18. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement by September 12, 2022. We look forward to your joining the Company.

Very truly yours,

By: /s/Jeffrey Tong
Name: Jeffrey Tong
Title: Chairman of the Board of Directors

Enclosure (Employee Confidentiality, Assignment and Nonsolicitation Agreement)

I have read and accept this employment offer:

By: /s/ Jeffrey Finer
Name: Jeffrey Finer

Date Signed: 9-11-2022

Appendix A

1. "Cause" shall mean: (i) conduct by you constituting a material act of misconduct in connection with the performance of your duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary and de minimis use of Company property for personal purposes; (ii) your commission of (A) any felony; or (B) a misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) any conduct by you that would reasonably be expected to result in material injury or material reputational harm to the Company or any of its subsidiaries and affiliates if you were retained in you; (iv) your continued willful non-performance of your responsibilities hereunder (other than by reason of your physical or mental illness, incapacity or disability) which has continued for more than thirty (30) days following written notice of such non-performance from the Board; (v) your breach of any obligation in the Restrictive Covenants Agreement; (vi) a material violation by you of any of the Company's written employment policies; or (vii) your failure to reasonably cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Board to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

2. "Change in Control" shall have the same meaning as the term "Sale Event" is defined in the Plan.

3. "Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

4. "Good Reason" shall mean that you have complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in your responsibilities, authority or duties; (ii) a material diminution in your Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all or substantially all senior management employees of the Company; or (iii) the material breach of your employment agreement by the Company.

5. "Good Reason Process" shall mean that (i) you reasonably determine in good faith that a "Good Reason" condition has occurred; (ii) you notify the Company in writing of the first occurrence of the Good Reason condition within 60 days of the first occurrence of such condition; (iii) you cooperate in good faith with the Company's efforts, for a period not less than 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) you terminate your employment within 60 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

Exhibit 10.7

January 18, 2022

Ran Xiao

Re: Offer of Employment by Septerna, Inc.

Dear Ran:

On behalf of Septerna, Inc. (the "Company"), I am pleased to offer you the position of Vice President, Finance and Business Operations. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement:

1. **Position**. As Vice President, Finance and Business Operations you will report to Jeff Finer, President & Chief Executive Officer, or another duly authorized manager or executive. This is a full-time, exempt position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting, or other business activities (whether full-time or part-time), except as expressly authorized in writing by the Company's Chief Executive Officer (the "CEO"). Notwithstanding the foregoing, you may engage in religious, charitable, and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. **Start Date**. Your employment with the Company will begin on February 28, 2022, unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. **Compensation and Related Matters**.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $300,000.00 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) The Company will pay you a sign-on bonus as follows: $15,000 within 30 days of your start date, and $15,000 within 30 days of the first year anniversary of your start date. Each payment is less applicable tax-related deductions and withholdings (each, a "Sign-On Bonus Disbursement"); provided that to earn each portion of the sign-on bonus, you must be employed by the Company as of the date of the Sign-On Bonus Disbursement and provided, further, that if the Company terminates your employment for Cause (as defined below) or you resign your employment for any reason in either case prior to the second anniversary of each Sign-On Bonus Disbursement, you will repay the sign-on bonus within 10 days after the Date of Termination (as defined below) as follows:

(c)

Length of Service from Sign-On Bonus Disbursement Date	Percentage of Sign-On Bonus Disbursement Repayment
Less than 12 months	100%
Between 12-24 months	50%

(d) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 25% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. **Equity Award.** The Company shall grant to you a restricted stock award for 500,000 shares of the Company's common stock (the "Restricted Shares"). The Restricted Shares will be subject to the standard terms and conditions of the Company's Stock Incentive Plan and the applicable equity award agreement (the "Equity Documents"), including with respect to vesting as follows: 25% of the Restricted Shares shall vest on the first anniversary of your Start Date and an additional 2.08334% per month for the next thirty-six successive months, subject to your continued employment with the Company at each such vesting date, such that the Restricted Shares shall be fully vested upon the fourth (4th) anniversary of your Start Date.

5. **Location**. Your primary work location will be at the Company's office, which is currently in South San Francisco, California, *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. **At-Will Employment; Date of Termination**. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason. Although your job duties, title, reporting structure, compensation, and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the CEO. Your last day of employment for any reason is referred to herein as the "Date of Termination."

7. **Accrued Obligations**. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary through the Date of Termination and, through the Date of Termination, and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations"). Other than the Accrued Obligations, you will not be entitled to any compensation from the Company in connection with the ending of your employment.

8. **Confidential Information and Restricted Activities**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment and Nonsolicitation Agreement enclosed with this letter agreement (the "Restrictive Covenants Agreement"). This offer is conditioned on your representation that you are not subject to any confidentiality, noncompetition, nonsolicitation, invention assignment or other agreement that restricts your employment activities or that may affect your ability to devote full time and attention to your work at the Company. If you have entered into any agreement that may restrict your activities on behalf of the Company, please provide me with a copy of the agreement as soon as possible. You further represent that you have not used and will not use or disclose any trade secret or other proprietary right of any previous employer or any other party.

9. **Withholding; Tax Effect**. All forms of compensation referred to in this letter agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Company's Board of Directors related to tax liabilities arising from your compensation.

10. **Interpretation and Enforcement**. This letter agreement, together with the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this letter agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this letter agreement or arising out of, related to, or in any way connected with this letter agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in the State of California in connection with any Dispute or any claim related to any Dispute.

11. **Assignment**. Neither you nor the Company may make any assignment of this letter agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however*, that the Company may assign its rights and obligations under this letter agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets. This letter agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

12. **Other Terms**. This offer is contingent on the completion of successful reference and background checks, and proof of full COVID vaccination (including all eligible booster vaccinations), if so requested and as determined by the Company. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

[Signature page follows.]

To accept this offer of employment, please sign and return this letter agreement and the Restrictive Covenants Agreement by **January 21, 2022**. We look forward to your joining the Company.

Very truly yours,

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: President & CEO

Enclosure (Employee Confidentiality, Assignment and Nonsolicitation Agreement)

I have read and accept this employment offer:

/s/ Ran Xiao
Ran Xiao

Date: 1/17/2022

Exhibit 10.8

May 20, 2022

Liz Bhatt

Re: Offer of Employment by Septerna, Inc.

Dear Liz:

On behalf of Septerna, Inc. (the "'Company"), I am pleased to confirm our offer to employ you as Chief Operating Officer. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As Chief Operating Officer, you will report to Jeff Finer, President & Chief Executive Officer, or another duly authorized executive. This is a full-time employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by the Company's Chief Executive Officer (the "CEO"). You may continue to serve on your current external Board seat, as well as add a second Board commitment, provided no conflict of interest with Septerna and approval from the Septerna CEO and Board. At the time of public offering, you will be held to governance recommendations for Board commitments as outlines by relevant bodies, e.g., Glass Lewis and ISS. Notwithstanding the foregoing, you may engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on June 15, 2022 unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $400,000 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 35% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(c) **Sign-on Bonus**: The Company will pay you a sign-on bonus as follows: $60,000 within 30 days of your start date. The payment is less applicable tax-related deductions and withholdings ("Sign-On Bonus Disbursement"); provided that to earn the sign-on bonus, you must be employed by the Company as of the date of the Sign-On Bonus Disbursement and provided, further, that if the Company terminates your employment for Cause (as defined below) or you resign your employment for any reason in either case prior to the first anniversary of the Sign-On Bonus Disbursement, you will repay the sign-on bonus within 10 days after the Date of Termination (as defined below) as follows:

Length of Service from Sign-On Bonus Disbursement Date	Percentage of Sign-On Bonus Disbursement Repayment
Less than 12 months	100%

(d) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its executives.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. Equity Award. The Company shall grant to you a restricted stock award for 1,500,000 shares of the Company's common stock (the "Restricted Shares"). The Restricted Shares will be subject to the standard terms and conditions of the Company's Stock Incentive Plan and the applicable equity award agreement (the "Equity Documents"), including with respect to vesting as follows: 25% of the Restricted Shares shall vest on the first anniversary of your Start Date and an additional 2.08334% per month for the next thirty-six successive months, subject to your continued employment with the Company at each such vesting date, such that the Restricted Shares shall be fully vested upon the fourth (4th) anniversary of your Start Date.

5. Location. Your primary work location will be at the Company's office, which is currently in South San Francisco, California, *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Chairman of the Board. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that

you elect to end your employment the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

To the extent applicable, you shall be deemed to have resigned from all officer and board member positions that you hold with the Company or any of its respective subsidiaries and affiliates upon the termination of your employment for any reason. You shall execute any documents in reasonable form as may be requested to confirm or effectuate any such resignations.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary through the Date of Termination and, if applicable, any accrued but unused vacation, through the Date of Termination, and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities, a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations, all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to 9 months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you and your qualifying dependents if you had remained employed by the Company until the earliest of (A) the 9 month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights under COBRA; *provided*, *however*, that if the Company reasonably determines that it cannot pay such amounts to the group health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 60 days after the Date of Termination; *provided*, *however*, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; *provided*, *further*, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

If your employment ends for any reason other than a termination by the Company without Cause you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8, and (ii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based awards subject to time-based vesting (the "Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (i) the Date of Termination or (ii) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); *provided* that any termination or forfeiture of the unvested portion of such TimeBased Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

10. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment, and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 10 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of nonpublic information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 10(c).

(d) **Relief**. You agree that it would be difficult to measure any damages caused to the Company which might result from your breach of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

11. Section 409A

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a “specified employee” within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months

and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1,409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

13. Interpretation and Enforcement. This Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

14. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided*, *however*, that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; *provided further*, that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

15. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

16. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Conditions. This offer is contingent on the completion of successful reference and background checks, and proof of full COVID vaccination (e.g. Modema, Pfizer, or J&J/Janssen vaccine) including all eligible booster vaccinations, if so requested and as determined by the Company. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

18. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement by May 25, 2022. We look forward to your joining the Company.

Very truly yours,

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: President & Chief Executive Officer

Enclosure (Confidentiality, Assignment, and Nonsolicitation Agreement)

I have read and accept this employment offer:

/s/ Liz Bhatt
Liz Bhatt

Date Signed: June 16, 2022

Appendix A

1) "Cause" shall mean (i) your statements or acts with respect to the Company or any affiliate of the Company, or any current or prospective customers, suppliers vendors or other third parties with which such entity does business that results in or is reasonably anticipated to result in material harm to the Company; (ii) your commission of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) your failure to perform your assigned duties and responsibilities to the reasonable satisfaction of the Company's Chief Executive Officer (the "CEO")., which failure continues, in the reasonable judgment of the Chief Executive Officer, for thirty (30) days after written notice given to you describing such failure; (iv) your gross negligence, willful misconduct or insubordination that results in or is reasonably anticipated to result in material harm to the Company; or (v) your violation of any material provision of any agreement(s) between you and the Company or any Company policies including, without limitation, agreements relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions or policies related to ethics or workplace conduct.

2) "Change in Control" shall mean (i) the sale of the Company in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Company's Board of Directors in their sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing of the Company, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, or reorganization required to effect an initial public offering, be deemed a "Change in Control" for purposes of this Agreement.

3) "Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

September 4, 2024

Jae Kim, M.D.

Re: Offer of Employment by Septerna, Inc.

Dear Jae:

On behalf of Septerna, Inc. (the "Company"), I am pleased to confirm our offer to employ you as our Chief Medical Officer. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As Chief Medical Officer, you will report to Jeff Finer, Chief Executive Officer. This is a full-time, exempt employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by the Company's Chief Executive Officer (the "CEO"). Notwithstanding the foregoing, you may engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on September 24, 2024, unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $465,000.00 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Sign-on Bonus**. The Company will pay you a sign-on bonus as follows: $50,000 within 30 days of your start date, and $50,000 within 30 days of the first-year anniversary of your start date. Each payment is less applicable tax-related deductions and withholdings (each, a "Sign-On Bonus Disbursement"); provided, that to earn each portion of the sign-on bonus, you must be employed by the Company as of the date of the Sign-On Bonus Disbursement and provided, further, that if the Company terminates your employment for Cause or you resign your employment for any reason in either case prior to the second anniversary of the Sign-On Bonus Disbursement, you will repay the sign-on bonus within 10 days after the Date of Termination (as defined below) as follows:

Length of Service from Sign-On Bonus Disbursement Date	Percentage of Sign-On Bonus Disbursement Repayment
Less than 12 months	100%
Between 12-24 months	50%

(c) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 35% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates, and for the first year will be prorated based on your Start Date.

(d) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

(e) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its executives.

4. Equity Grant. Subject to approval of the Company's Board of Directors (the "Board") and your continued employment on the date of grant or issuance, the Company shall grant to you an option to purchase a number of shares of the Company's common stock equal to 1,600,000 shares (the "Stock Option Grant"). The exercise price of the Stock Option Grant shares will be at least equal to the fair market value of the Company's common stock on the date of the grant, and the Board may elect to seek a third-party valuation of such fair market value, which could delay the date that the Stock Option Grant is granted. The Stock Option Grant will be subject to the standard terms and conditions of the Company's Stock Incentive Plan and the applicable equity award agreement (the "Equity Documents"), including with respect to vesting as follows: 25% of the Options shall vest on the first anniversary of your Start Date and an additional 2.08334% per month for the next thirty-six successive months, subject to your continued employment with the Company at each such vesting date, such that the Options shall be fully vested upon the fourth (4th) anniversary of your Start Date.

5. Location. Your primary work location shall be your residence in the San Diego, California area. Notwithstanding the foregoing, you shall be required to travel to the Company's headquarters located in South San Francisco, California, and spend a substantial amount of time there initially to ensure successful integration with the team, with frequent travel to the Company's headquarters thereafter (anticipated to be multiple trips each month) for the duration of your employment. In addition to travel to the Company's headquarters, you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the CEO. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that you elect to end your employment the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

To the extent applicable, you shall be deemed to have resigned from all officer and board member positions that you hold with the Company or any of its respective subsidiaries and affiliates upon the termination of your employment for any reason. You shall execute any documents in reasonable form as may be requested to confirm or effectuate any such resignations.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary through the Date of Termination and, if applicable, any accrued but unused vacation, through the Date of Termination, and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities, a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations, all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to 9 months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you and your qualifying dependents if you had remained employed by the Company until the earliest of (A) the 9 month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights

under COBRA; *provided, however*, that if the Company reasonably determines that it cannot pay such amounts to the group health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 60 days after the Date of Termination; *provided, however*, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; *provided, further*, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

If your employment ends for any reason other than a termination by the Company without Cause you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8, and (ii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based awards subject to time-based vesting (the "Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (i) the Date of Termination or (ii) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); *provided* that any termination or forfeiture of the unvested portion of such Time-Based Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

10. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment**,** and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 10 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of non-public information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 10(c).

(d) **Relief**. You agree that it would be difficult to measure any damages caused to the Company which might result from your breach of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly**,** you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

11. Section 409A.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

13. Interpretation and Enforcement. This Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

14. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however*, that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; *provided further*, that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

15. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

16. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Conditions. This offer is contingent on the completion of successful reference and background checks, and proof of full COVID vaccination including all eligible booster / annual vaccinations, and if the Company makes future vaccinations mandatory at its discretion, your continued employment may be contingent upon keeping up with vaccinations that you are eligible for. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

18. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement by September 7, 2024. We look forward to your joining the Company.

Very truly yours,

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: Chief Executive Officer

Enclosure (Confidentiality, Assignment, and Nonsolicitation Agreement)

I have read and accept this employment offer:

/s/ Jae Kim
Jae Kim

Date Signed: 9/4/2024

Appendix A

1) "Cause" shall mean (i) your statements or acts with respect to the Company or any affiliate of the Company, or any current or prospective customers, suppliers vendors or other third parties with which such entity does business that results in or is reasonably anticipated to result in material harm to the Company; (ii) your commission of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) your failure to perform your assigned duties and responsibilities to the reasonable satisfaction of the Company's Chief Executive Officer (the "CEO")., which failure continues, in the reasonable judgment of the Chief Executive Officer, for thirty (30) days after written notice given to you describing such failure; (iv) your gross negligence, willful misconduct or insubordination that results in or is reasonably anticipated to result in material harm to the Company; or (v) your violation of any material provision of any agreement(s) between you and the Company or any Company policies including, without limitation, agreements relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions or policies related to ethics or workplace conduct.

2) "Change in Control" shall mean (i) the sale of the Company in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Company's Board of Directors in their sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing of the Company, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, or reorganization required to affect an initial public offering, be deemed a "Change in Control" for purposes of this Agreement.

3) "Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

Exhibit 10.10

December 22, 2022

Samira Shaikhly

Re: Offer of Employment by Septerna, Inc.

Dear Samira:

On behalf of Septema, Inc. (the "Company"), I am pleased to confirm our offer to employ you as Chief People Officer. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As Chief People Officer, you will report to Jeff Finer, Chief Executive Officer. This is a full-time employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by the Company's Chief Executive Officer (the "CEO"). Notwithstanding the foregoing, you may engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on February 1, 2023 unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $350,000 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 30% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(c) **Sign-on Bonus**: The Company will pay you a sign-on bonus as follows: $50,000 within 30 days of your start date. The payment is less applicable tax-related deductions and withholdings ("Sign-On Bonus Disbursement"); provided that to earn the sign-on bonus, you must be employed by the Company as of the date of the Sign-On Bonus Disbursement and provided, further, that if the Company terminates your employment for Cause (as defined below) or you resign your employment for any reason in either case prior to the second anniversary of the Sign-

On Bonus Disbursement, you will repay the sign-on bonus within 10 days after the Date of Termination (as defined below) as follows:

Length of Service from Sign- On Bonus Disbursement Date	Percentage of Sign-On Bonus Disbursement Repayment
Less than 24 months	100%

(d) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its executives.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. Equity Award. Subject to approval of the Company's Board of Directors (the "Board") and your continued employment on the date of grant or issuance, the Company shall grant to you an option to purchase a number of shares of the Company's common stock equal to 600,000 shares (the "Stock Option Grant"). The exercise price of the Stock Option Grant shares will be at least equal to the fair market value of the Company's common stock on the date of the grant, and the Board may elect to seek a third-party valuation of such fair market value, which could delay the date that the Stock Option Grant is granted. The Stock Option Grant will be subject to the standard terms and conditions of the Company's Stock Incentive Plan and the applicable equity award agreement (the "Equity Documents"), including with respect to vesting as follows: 25% of the Options shall vest on the first anniversary of your Start Date and an additional 2.08334% per month for the next thirty-six successive months, subject to your continued employment with the Company at each such vesting date, such that the Options shall be fully vested upon the fourth (4th) anniversary of your Start Date.

5. Location. Your primary work location will be at the Company's office, which is currently in South San Francisco, California, *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an

express written agreement signed by you and the CEO. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that you elect to end your employment the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

To the extent applicable, you shall be deemed to have resigned from all officer and board member positions that you hold with the Company or any of its respective subsidiaries and affiliates upon the termination of your employment for any reason. You shall execute any documents in reasonable form as may be requested to confirm or effectuate any such resignations.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary through the Date of Termination and, if applicable, any accrued but unused vacation, through the Date of Termination, and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities, a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations, all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to 6 months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you and your qualifying dependents if you had remained employed by the Company until the earliest of (A) the 6 month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights under COBRA; *provided*, *however*, that if the Company reasonably determines that it cannot pay such amounts to the group health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 6 months commencing within 60 days after the Date of Termination; *provided*, *however*, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; *provided*, *further*, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

If your employment ends for any reason other than a termination by the Company without Cause you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8, and (ii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based awards subject to time-based vesting (the ''Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (i) the Date of Termination or (ii) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); *provided* that any termination or forfeiture of the unvested portion of such TimeBased Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

10. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment, and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 10 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of nonpublic information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 10(c).

(d) **Relief**. You agree that it would be difficult to measure any damages caused to the Company which might result from your breach of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

11. Section 409A

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1,409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

13. Interpretation and Enforcement. This Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

14. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided*, *however*, that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; *provided further*, that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

15. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

16. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Conditions. This offer is contingent on the completion of successful reference and background checks, and proof of full COVID vaccination (e.g., Moderna, Pfizer, or J&J/Janssen vaccine) including all eligible booster vaccinations, if so requested and as determined by the Company. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

18. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement by December 22, 2022. We look forward to your joining the Company.

Very truly yours,

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: Chief Executive Officer

Enclosure (Confidentiality, Assignment, and Nonsolicitation Agreement)

I have read and accept this employment offer:

/s/ Samira Shaikhly
Samira Shaikhly

Date Signed: December 22, 2022

Appendix A

1) "Cause" shall mean (i) your statements or acts with respect to the Company or any affiliate of the Company, or any current or prospective customers, suppliers vendors or other third parties with which such entity does business that results in or is reasonably anticipated to result in material harm to the Company; (ii) your commission of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) your failure to perform your assigned duties and responsibilities to the reasonable satisfaction of the Company's Chief Executive Officer (the "CEO")., which failure continues, in the reasonable judgment of the Chief Executive Officer, for thirty (30) days after written notice given to you describing such failure; (iv) your gross negligence, willful misconduct or insubordination that results in or is reasonably anticipated to result in material harm to the Company; or (v) your violation of any material provision of any agreement(s) between you and the Company or any Company policies including, without limitation, agreements relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions or policies related to ethics or workplace conduct.

2) "Change in Control" shall mean (i) the sale of the Company in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Company's Board of Directors in their sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing of the Company, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, or reorganization required to affect an initial public offering, be deemed a "Change in Control" for purposes of this Agreement.

3) "Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

Exhibit 10.11

February 17, 2021

Uwe Klein

Re: Offer of Employment by GPCR Newco Inc.

Dear Uwe,

On behalf of GPCR Newco Inc. (the "Company"), I am pleased to confirm our offer to employ you as Senior Vice President, Biological Sciences. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As Senior Vice President, Biological Sciences, you will report to Jeff Finer, President. This is a full-time employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by the Company's President. Notwithstanding the foregoing, you may engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on the Closing of the Company's Series A Financing. The actual first day of your employment with the Company shall be referred to herein as the "Start Date." Any services you provided to the Company prior to the Start Date shall be governed by agreements related to those pre-employment services and shall terminate on the Start Date, except the confidentiality/assignment of inventions agreement you entered into (the "Preserved Agreement"), which shall remain in full force and effect.

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $330,000.00 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 30% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(c) **Sign-On Bonus**. Within 30 days following the Start Date, the Company will pay you a one-time signing bonus in the amount of $100,000.00, less applicable tax-related deductions and withholdings (the "Sign-On Bonus"); *provided* that if the Company terminates your employment for Cause (as defined below) or you resign your employment for any reason, in either case prior to the two (2) year anniversary of the Start Date, you will repay all or a portion of Sign- On Bonus within 10 days after the Date of Termination (as defined below) as follows:

Length of Service	Percentage of Sign-On Bonus Repayment
Less than 12 months	100%
Between 12-24 months	50%

(d) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. Equity Award. At such time as the Company issues and sells shares of its capital stock in connection with the Series A Financing which results in aggregate proceeds to the Company up to $80,000,000 (the "Initial Raise"), and subject to approval of the Board and your continued employment on the date of grant or issuance, the Company shall grant to you (at your option) either a restricted stock award for a number of shares of the Company's common stock (the "Restricted Shares") or stock options to purchase a number of shares of the Company's common stock (the "Options") equal to 0.8% of the Company's fully diluted capitalization (reflecting then outstanding capital stock and stock options) following such issuance and sale, assuming for the purpose of such grant that the full amount of the Initial Raise has been issued and sold in such Series A Financing; *provided, however,* that the Company shall have no obligation to grant to you Restricted Shares or Options hereunder in respect of any equity financing other than the Initial Raise. The Restricted Shares or Options will be subject to the standard terms and conditions of the Company's equity incentive plan and shall vest in proportion to the amount raised in connection with each successive closing comprising the Series A Financing as further set forth in the applicable equity award agreement (together, the "Equity Documents"). The period of time prior to the Series A Financing served as an consultant under a consulting agreement with the Company will be credited towards the vesting period for the Restricted Shares or Options granted in association with the first closing of Series A Financing.

5. Location. Your primary work location will be at the Company's office, which is currently in the San Francisco Bay Area *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the President. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that you elect to end your employment, the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary and, if applicable, any accrued but unused vacation, through the Date of Termination, and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause, outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities and a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations, all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to 6 months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you if you had remained employed by the Company until the earliest of (A) the 6th month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights under COBRA; provided, however, that if the Company reasonably determines that it cannot pay such amounts to the group health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

(c) The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 6 months commencing within 60 days after the Date of Termination; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; provided, further, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A- 2(b)(2).

(d) If your employment ends for any reason other than a termination by the Company without Cause, you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8, and (ii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based awards subject to time-based vesting (the "Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (i) the Date of Termination or (ii) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); provided that any termination or forfeiture of the unvested portion of such Time-Based Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

10. For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

11. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 8 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of nonpublic information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 8(c).

(d) **Relief**. You agree that it would be difficult to measure any damages caused to the Company which might result from your breach of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

12. Section 409A

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-l(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

13. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

14. Interpretation and Enforcement. This Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company; *provided, however,* and for the avoidance of doubt, any consulting agreement in effect prior to the Start Date will terminate no later than the Start Date, or sooner in accordance with its terms, *provided further,* that the Preserved Agreement will remain in full force and effect. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in the State of California in connection with any Dispute or any claim related to any Dispute.

15. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however,* that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; provided further, that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

16. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

17. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

18. Conditions. This offer is contingent on the completion of successful reference and background checks, if so requested and as determined by the Company. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

19. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement to Chris Passmore by February 19, 2021. We are excited about the future of the Company and we look forward to working with you!

Sincerely,

/s/ Jeffrey Finer
Jeff Finer, President

I have read and accept this employment offer:

/s/ Uwe Klein
Uwe Klein

Date: February 17th, 2021

Enclosure (Restrictive Covenants Agreement)

"Cause" means: (i) conduct by you constituting a material act of misconduct in connection with the performance of your duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary and *de minimis* use of Company property for personal purposes; (ii) your commission of (A) any felony; or (B) a misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) any conduct by you that would reasonably be expected to result in material injury or material reputational harm to the Company or any of its subsidiaries and affiliates if you were retained in you; (iv) your continued willful non-performance of your responsibilities hereunder (other than by reason of your physical or mental illness, incapacity or disability) which has continued for more than thirty (30) days following written notice of such non-performance from the President; (v) your breach of any obligation in the Restrictive Covenants Agreement; (vi) a material violation by you of any of the Company's written employment policies; or (vii) your failure to reasonably cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the President to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

"Change in Control" shall mean (i) the sale of the Company in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Company's Board of Directors in their sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing of the Company, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, or reorganization required to effect an initial public offering, be deemed a "Change in Control" for purposes of this Agreement.

"Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

Exhibit 10.12

September 27, 2021

Daniel Long

Re: Offer of Employment by Septerna, Inc.

Dear Daniel:

On behalf of Septerna, Inc. (the "Company"), I am pleased to confirm our offer to employ you as Senior Vice President, Drug Discovery. The initial terms and conditions of your employment, should you accept this offer, are set forth below in this letter agreement (the "Agreement"):

1. Position. As Senior Vice President, Drug Discovery, you will report to me, or another duly authorized executive. This is a full-time employment position. It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), except as expressly authorized in writing by me. Notwithstanding the foregoing, you may engage in religious, charitable and other community activities so long as such activities do not interfere or conflict with your obligations to the Company.

2. Start Date. Your employment with the Company will begin on October 4, 2021 unless another date is agreed to by you and the Company. The actual first day of your employment with the Company shall be referred to herein as the "Start Date."

3. Compensation and Related Matters.

(a) **Base Salary**. The Company will pay you an initial base salary at the rate of $350,000.00 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustments at the Company's discretion. Your base salary in effect at any given time is referred to herein as the "Base Salary."

(b) **Annual Bonus**. You will initially be eligible to receive an annual performance bonus of up to 30% of your Base Salary. The target annual bonus in effect at any given time is referred to herein as "Target Bonus." Any bonus awarded for the calendar year in which your employment commences will be prorated based on the Start Date. The actual bonus amount is discretionary. To earn an annual bonus, you must be employed by the Company as of the payment date of such bonus. Any annual bonus will be paid no later than March 15th of the calendar year following the calendar year to which such bonus relates.

(c) **Sign-On Bonus**. The Company will pay you a sign-on bonus as follows: $62,500.00 within 30 days of January 1, 2022 (the "Initial Disbursement") and $62,500.00 within 30 days of January 1, 2023 (together with the Initial Disbursement, the "Sign-On Bonus Disbursements"), each payment less applicable tax-related deductions and withholdings ; provided that to earn each portion of the sign-on bonus, you must be employed by the Company as of the

date of the Sign-On Bonus Disbursements and provided, further, that if the Company terminates your employment for Cause (as defined below) or you resign your employment for any reason, you will repay the sign-on bonus within 10 days after the Date of Termination (as defined below) as follows:

Date of Disbursement	Length of Service from Disbursement Date / Percentage of Sign-on Bonus Disbursement Repayment	Date of Full Vesting
January 2022	0-12 months: 100% 12-24 months: 50%	January 2024 (24-month anniversary of first disbursement)
January 2023	0-12 months: 100%	January 2024 (12-month anniversary of second disbursement)

(d) **Expenses**. The Company will promptly reimburse you for all reasonable expenses incurred by you in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its executives.

(e) **Benefits/Paid Time Off**. You will be eligible, subject to the terms of the applicable plans and programs, to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. Details of such benefits programs, including mandatory employee contributions, if any, and waiting periods, if applicable, will be made available to you as and when such benefit(s) become available. You will be entitled to paid time off consistent with the terms of the Company's paid time off policy, as in effect from time to time. The Company reserves the right to modify, amend or cancel any of its benefits plans or programs at any time.

4. Equity Award. At such time as the Company issues and sells shares of its capital stock in connection with the Series A Financing which results in aggregate proceeds to the Company up to $80 million (the "Initial Raise"), subject to approval of the Board and your continued employment on the date of grant or issuance, the Company shall grant to you a restricted stock award of 800,000 shares of the Company's common stock (the "Restricted Shares"). The Restricted Shares will be subject to the standard terms and conditions of the and the applicable equity award agreement (the "Equity Documents"), including with respect to vesting as follows: 25% of the Restricted Shares shall vest on the first anniversary of the commencement date of your employment (the "Vesting Commencement Date") and an additional 2.08334% per month for the next thirty-six successive months, subject to your continued employment with the Company at each such vesting date, such that the Restricted Shares shall be fully vested upon the fourth (4^{th}) anniversary of the Start Date.

5. Location. Your primary work location will be at the Company's office, which is currently in South San Francisco, California, *provided* that you may be required to travel for business from time to time, consistent with the Company's business needs.

6. At-Will Employment; Date of Termination. At all times your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason, subject to the terms of this Agreement. Although your job duties, title, reporting structure, compensation and benefits, as well as the Company's benefit plans and personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Chairman of the Board. Your last day of employment for any reason is referred to herein as the "Date of Termination." In the event that you elect to end your employment the Company requires you to provide at least 30 days' advance written notice to the Company. Notwithstanding the foregoing, the Company may unilaterally accelerate the Date of Termination, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

To the extent applicable, you shall be deemed to have resigned from all officer and board member positions that you hold with the Company or any of its respective subsidiaries and affiliates upon the termination of your employment for any reason. You shall execute any documents m reasonable form as may be requested to confirm or effectuate any such resignations.

7. Accrued Obligations. In the event of the ending of your employment for any reason, the Company shall pay you (i) your Base Salary through the Date of Termination and (ii) the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

8. Severance Pay and Benefits Outside of the Change in Control Period. In the event that the Company terminates your employment without Cause outside of the Change in Control Period (as such capitalized terms are defined in Appendix A), then, in addition to you being entitled to the Accrued Obligations, and subject to (i) you signing a separation agreement and release in a form and manner reasonably satisfactory to the Company, which shall include, without limitation, a general release of claims against the Company and all related persons and entities, a reaffirmation of the Continuing Obligations (as defined below) and shall provide that if you breach the Continuing Obligations) all payments of the Severance Amount (as defined below) shall immediately cease (the "Separation Agreement and Release"), and (ii) the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period:

(a) The Company shall pay you an amount equal to 6 months of your Base Salary (the "Severance Amount"); and

(b) subject to your copayment of premium amounts at the applicable active employees' rate and your proper election to receive benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall pay to the group health plan provider(s), the COBRA provider or you a monthly payment equal to the monthly employer contribution that the Company would have made to provide health insurance to you if you had remained employed by the Company until the earliest of (A) the 6 month anniversary of the Date of Termination; (B) your eligibility for group health plan benefits under any other employer's group health plan; or (C) the cessation of your continuation rights under COBRA; *provided*, *however*, that if the Company reasonably determines that it cannot pay such amounts to the group

health plan provider(s) or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to you for the time period specified above. Such payments, if to you, shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under this Section 8, to the extent taxable, shall be paid out in substantially equal installments in accordance with the Company's payroll practice over months commencing within 60 days after the Date of Termination; *provided*, *however*, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Amount, to the extent it qualifies as "non-qualified deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), shall begin to be paid in the second calendar year by the last day of such 60-day period; *provided*, *further*, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

If your employment ends for any reason other than a termination by the Company without Cause you will be entitled to the Accrued Obligations and will not be entitled to any further compensation from the Company. For the avoidance of doubt, if your employment ends due to your death or disability, you will receive the Accrued Obligations but will not be eligible for severance pay and benefits, whether pursuant to Section 8, Section 9 or otherwise.

9. Severance Pay and Benefits Within the Change in Control Period. In the event that the Company terminates your employment without Cause within the Change in Control Period, then, in addition to you being entitled to the Accrued Obligations, and subject to you signing the Separation Agreement and Release and it becoming fully effective, all within 60 days after the Date of Termination (or such shorter period as set forth in the Separation Agreement and Release), which shall include a seven (7) day revocation period, the Company shall (i) provide you the severance pay and benefits set forth in Section 8, subject to the terms and conditions set forth in Section 8, and (ii) notwithstanding anything to the contrary in any applicable option agreement or other stock-based award agreement, all of your time-based stock options and other stock-based awards subject to time-based vesting (the "Time-Based Equity Awards") shall immediately accelerate and become fully exercisable or nonforfeitable as of the later of (i) the Date of Termination or (ii) the effective date of the Separation Agreement and Release (the "Accelerated Vesting Date"); *provided* that any termination or forfeiture of the unvested portion of such Time-Based Equity Awards that would otherwise occur on the Date of Termination in the absence of this Agreement will be delayed until the effective date of the Separation Agreement and Release and will only occur if the vesting pursuant to this subsection does not occur due to the absence of the Separation Agreement and Release becoming fully effective within the time period set forth therein. Notwithstanding the foregoing, no additional vesting of the Time-Based Equity Awards shall occur during the period between the Date of Termination and the Accelerated Vesting Date.

For the avoidance of doubt, Section 8 and Section 9 of this Agreement are mutually exclusive and in no event shall you be entitled to payments or benefits pursuant to both Section 8 and Section 9 of this Agreement.

10. Continuing Obligations.

(a) **Restrictive Covenants Agreement**. As a condition of your employment, you are required to enter into the Employee Confidentiality, Assignment, and Nonsolicitation Agreement enclosed with this Agreement (the "Restrictive Covenants Agreement"). For purposes of this Agreement, the obligations in this Section 10 and those that arise in the Restrictive Covenants Agreement and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(b) **Third Party Agreements and Rights**. You hereby confirm that you are not bound by the terms of any agreement with any previous employer or other party which restricts in any way your use or disclosure of information, other than confidentiality restrictions (if any) or your engagement in any business. You represent to the Company that your execution of this Agreement, your employment with the Company and the performance of your proposed duties for the Company will not violate any obligations you may have to any such previous employer or other party. In your work for the Company, you will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and you will not bring to the premises of the Company any copies or other tangible embodiments of non-public information belonging to or obtained from any such previous employment or other party.

(c) **Litigation and Regulatory Cooperation**. During and after your employment, you shall cooperate fully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while you were employed by the Company, and (ii) the investigation, whether internal or external, of any matters about which the Company believes you may have knowledge or information. Your full cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions or to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after your employment, you also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while you were employed by the Company. The Company shall reimburse you for any reasonable out-of-pocket expenses incurred in connection with your performance of obligations pursuant to this Section 10(c).

(d) **Relief**. You agree that it would be difficult to measure any damages caused to the Company which might result from your breach of any of the Continuing Obligations, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, you agree that if you breach, or propose to breach, any portion of the Continuing Obligations, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

11. Section 409A.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement or otherwise on account of your separation from service would be considered deferred compensation otherwise subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable·· year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the termination of your employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Withholding; Tax Effect. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.

13. Interpretation and Enforcement. This Agreement, together with Appendix A, the Restrictive Covenants Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company. Except as expressly otherwise provided in the Equity Documents or the Restrictive Covenants Agreement, the terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

14. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided*, *however*, that the Company may assign its rights and obligations under this Agreement without your consent to any affiliate or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets; *provided further*, that if you remain employed or become employed by the Company, the purchaser or any of their affiliates in connection with any such transaction, then you shall not be entitled to any payments, benefits or vesting pursuant to Section 8 or pursuant to Section 9 of this Agreement solely as a result of such transaction. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

15. Waiver; Amendment. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach. This Agreement may be amended or modified only by a written instrument signed by you and by a duly authorized representative of the Company.

16. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Conditions. This offer is contingent on the completion of successful reference and background checks, if so requested and as determined by the Company. In addition, all employees must be fully vaccinated against COVID-19 (with the Moderna, Pfizer, or J&J/Janssen vaccine) and submit a certification of same to the Company before your Start Date, unless the Company has approved a reasonable accommodation exempting you from this requirement. Please contact Human Resources if you require such an exemption due to a medical condition or a sincerely held religious belief. As with any employee, you must submit satisfactory proof of your identity and your legal authorization to work in the United States.

18. Other Terms. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of your employment to the extent necessary to effectuate the terms contained herein. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement. This Agreement may be executed in separate counterparts. When both counterparts are signed, they shall be treated together as one and the same document. PDF copies of signed counterparts shall be equally effective as originals.

[Signature page follows.]

To accept this offer of employment, please sign and return this Agreement and the Restrictive Covenants Agreement by September 27, 2021. We look forward to your joining the Company.

Very truly yours,

By: /s/ Jeffrey Finer
Name: Jeffrey Finer
Title: President

Enclosure (Confidentiality, Assignment, and Nonsolicitation Agreement)

I have read and accept this employment offer:

/s/ Daniel Long
Daniel Long

Date Signed:September 27, 2021

Appendix A

1) "Cause" shall mean (i) your statements or acts with respect to the Company or any affiliate of the Company, or any current or prospective customers, suppliers vendors or other third parties with which such entity does business that results in or is reasonably anticipated to result in harm to the Company; (ii) your commission of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) your failure to perform your assigned duties and responsibilities to the reasonable satisfaction of the Company's Chief Executive Officer (the "CEO")., which failure continues, in the reasonable judgment of the Chief Executive Officer, for thirty (30) days after written notice given to you describing such failure; (iv) your gross negligence, willful misconduct or insubordination that results in or is reasonably anticipated to result in harm to the Company; or (v) your violation of any material provision of any agreement(s) between you and the Company or any Company policies including, without limitation, agreements relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions or policies related to ethics or workplace conduct.

2) "Change in Control" shall mean (i) the sale of the Company in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Company's Board of Directors in their sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing of the Company, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, or reorganization required to effect an initial public offering, be deemed a "Change in Control" for purposes of this Agreement.

3) "Change in Control Period" shall mean the twelve (12) month period that immediately follows the first event constituting a Change in Control.

SEPTERNA, INC.
NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

The purpose of this Non-Employee Director Compensation Policy (the "Policy") of Septerna, Inc., a Delaware corporation (the "Company"), is to provide a total compensation package that enables the Company to attract and retain, on a long-term basis, high-caliber directors who are not employees or officers of the Company or its subsidiaries ("Outside Directors"). This Policy will become effective as of the effective time of the registration statement for the Company's initial public offering of its equity securities (the "Effective Date"). In furtherance of the purpose stated above, all Outside Directors shall be paid compensation for services provided to the Company as Outside Directors as set forth below:

Cash Retainers

Annual Retainer for Board Membership: $40,000 for general availability and participation in meetings and conference calls of our Board of Directors, to be paid quarterly in arrears, pro-rated based on the number of actual days served by the director during such calendar quarter. No additional compensation will be paid for attending individual meetings of the Board of Directors.

Additional Annual Retainer for Non-Executive Chairperson:	$30,000
Additional Annual Retainers for Committee Membership:	
Audit Committee Chairperson:	$15,000
Audit Committee member (other than Chairperson):	$ 7,500
Compensation Committee Chairperson:	$12,000
Compensation Committee member (other than Chairperson):	$ 6,000
Nominating and Corporate Governance Committee Chairperson:	$10,000
Nominating and Corporate Governance Committee member (other than Chairperson):	$ 5,000

Equity Retainers

All grants of equity retainer awards to Outside Directors pursuant to this Policy will be automatic and nondiscretionary and will be made in accordance with the following provisions:

Initial Award: Upon his or her initial election to the Board of Directors, each Outside Director will receive an initial, one-time stock option award (the "Initial Award") to purchase 33,246 shares, which shall vest in equal monthly installments over three years from the date of grant, provided, however, that all vesting shall cease if the director ceases his or her Service Relationship with the Company unless the Board of Directors determines that the circumstances warrant continuation of vesting. The Initial Award shall expire ten years from the date of grant, and shall have a per share exercise price equal to the Fair Market Value (as defined in the Company's 2024 Stock Option and Incentive Plan, as amended from time to time) of the Company's common stock on the date of grant. This Initial Award applies only to Outside Directors who are first elected to the Board of Directors subsequent to the Effective Date.

Annual Award: On each date of each Annual Meeting of Stockholders of the Company following the Effective Date (the "Annual Meeting"), each continuing Outside Director, other than a director receiving an Initial Award, will receive an annual stock option award (the "Annual Award") to purchase 16,623 shares, which shall vest in full upon the earlier of (i) the first anniversary of the date of grant or (ii) the date of the next Annual Meeting; provided, however, that all vesting shall cease if the director ceases his or her Service Relationship with the Company unless the Board of Directors determines that the circumstances warrant continuation of vesting. Such Annual Award shall expire ten years from the date of grant, and shall have a per share exercise price equal to the Fair Market Value of the Company's common stock on the date of grant. If a new Outside Director joins the Board of Directors on a date other than the date of the Annual Meeting, then in lieu of the above, such Outside Director will be granted a pro-rata portion of the Annual Award at the next Annual Meeting following the Outside Director's appointment, based on the number of full calendar months of service provided by the Outside Director to the Company between the Outside Director's appointment and the next Annual Meeting following the Outside Director's appointment (the "Pro-Rated Annual Grant"). The Pro-Rated Annual Grant will vest in full upon the earlier of (i) the first anniversary of the date of grant or (ii) the date of the next Annual Meeting; provided, however, that all vesting ceases if the Outside Director ceases his or her Service Relationship with the Company, unless the Board of Directors determines that the circumstances warrant continuation or acceleration of vesting. The Pro-Rated Annual Grant shall expire ten years from the date of grant, and shall have a per share exercise price equal to the Fair Market Value of the Company's common stock on the date of grant.

Value: For purposes of this Policy, "Value" means with respect to (i) any stock option award, the grant date fair value of the option (i.e., Black-Scholes Value) determined in accordance with the reasonable assumptions and methodologies employed by the Company for calculating the fair value of options under Financial Accounting Standard Board ("FASB") Accounting Standards Codification ("ASC") Topic 718; and (ii) any award of restricted stock or restricted stock units the product of (A) the closing market price on the Nasdaq Global Market (or such other market on which the Company's common stock is then principally listed) of one share of the Company's common stock on the date of grant and (B) the aggregate number of shares of common stock underlying such award.

Sale Event Acceleration: All outstanding Initial Awards and Annual Awards (including Pro-Rated Annual Grants) held by an Outside Director shall become fully vested, exercisable (if applicable) and nonforfeitable upon a Sale Event (as defined in the Company's 2024 Stock Option and Incentive Plan, as amended from time to time).

Expenses

The Company will reimburse all reasonable out-of-pocket expenses incurred by Outside Directors in attending meetings of the Board of Directors or any committee thereof.

Maximum Annual Compensation

The aggregate amount of compensation, including both equity compensation and cash compensation, paid by the Company to any Outside Director in a calendar year for services as an Outside Director shall not exceed $750,000 (or such other limit as may be set forth in Section 3(b) of the Company's 2024 Stock Option and Incentive Plan, as amended from time to time, or any similar provision of a successor plan); provided, however, that in the first calendar year in which an individual becomes an Outside Director, the aggregate amount of all equity compensation awarded and all other cash compensation paid by the Company to such Outside Director for services as an Outside Director shall not exceed $1,000,000 (or such other limit as may be set forth in Section 3(b) of the Company's 2024 Stock Option and Incentive Plan, as amended from time to time, or any similar provision of a successor plan). For this purpose, the "amount" of equity compensation paid in a calendar year shall be determined based on the grant date fair value thereof, as determined in accordance with FASB ASC Topic 718 or its successor provision, but excluding the impact of estimated forfeitures related to service-based vesting conditions.

Adopted October 1, 2024.

SEPTERNA, INC.
SENIOR EXECUTIVE CASH INCENTIVE BONUS PLAN

1. Purpose

This Senior Executive Cash Incentive Bonus Plan (the "Incentive Plan") is intended to provide an incentive for superior work and to motivate eligible executives of Septerna, Inc. (the "Company") and its subsidiaries toward even higher achievement and business results, to tie their goals and interests to those of the Company and its stockholders and to enable the Company to attract and retain highly qualified executives. The Incentive Plan is for the benefit of Covered Executives (as defined below).

2. Covered Executives

From time to time, the Compensation Committee of the Board of Directors of the Company (the "Compensation Committee") may select certain key executives (the "Covered Executives") to be eligible to receive bonuses hereunder. Participation in the Incentive Plan does not change the "at will" nature of a Covered Executive's employment with the Company.

3. Administration

The Compensation Committee shall have the sole discretion and authority to administer and interpret the Incentive Plan.

4. Bonus Determinations

(a) Corporate Performance Goals. A Covered Executive may receive a bonus payment under the Incentive Plan based upon the attainment of one or more performance objectives that are established by the Compensation Committee in its sole discretion and relate to financial and operational metrics with respect to the Company or any of its subsidiaries (the "Corporate Performance Goals"), including: developmental, publication, clinical or regulatory milestones; cash flow (including, but not limited to, operating cash flow and free cash flow); revenue; corporate revenue; earnings before interest, taxes, depreciation and amortization; net income (loss) (either before or after interest, taxes, depreciation and/or amortization); changes in the market price of the Company's common stock; economic value-added; acquisitions, licenses, collaborations or strategic transactions; financing or other capital raising transactions; operating income (loss); return on capital, assets, equity, or investment; stockholder returns; return on sales; total shareholder return; gross or net profit levels; productivity; expense efficiency; margins; operating efficiency; customer satisfaction; working capital; earnings (loss) per share of the Company's common stock; bookings, new bookings or renewals; sales or market shares; number of prescriptions or prescribing physicians; coverage decisions; leadership development, employee retention and recruiting and other human resources matters; operating income and/or net annual recurring revenue, or any other performance goal selected by the Compensation Committee, any of which may be (A) measured in absolute terms or compared to any incremental increase, (B) measured in terms of growth, (C) compared to another company or companies or to results of a peer group, (D) measured against the market as a whole and/or as

compared to applicable market indices and/or (E) measured on a pre-tax or post-tax basis (if applicable). Further, any Corporate Performance Goals may be used to measure the performance of the Company as a whole or a business unit or other segment of the Company, or one or more product lines or specific markets. The Corporate Performance Goals may differ from Covered Executive to Covered Executive and from performance period to performance period.

(b) Calculation of Corporate Performance Goals. At the beginning of each applicable performance period, the Compensation Committee will determine whether any significant element(s) will be included in or excluded from the calculation of any Corporate Performance Goal with respect to any Covered Executive. In all other respects, Corporate Performance Goals will be calculated in accordance with the Company's financial statements, generally accepted accounting principles or under a methodology established by the Compensation Committee at the beginning of the performance period and which is consistently applied with respect to a Corporate Performance Goal in the relevant performance period.

(c) Target; Minimum; Maximum. Each Corporate Performance Goal shall have a "target" (i.e., 100 percent attainment of the Corporate Performance Goal) and may also have a "minimum" hurdle and/or a "maximum" amount.

(d) Bonus Requirements; Individual Goals. Except as otherwise set forth in this Section 4(d): (i) any bonuses paid to Covered Executives under the Incentive Plan shall be based upon objectively determinable bonus formulas that tie such bonuses to one or more performance targets relating to the Corporate Performance Goals, (ii) bonus formulas for Covered Executives shall be adopted in each performance period by the Compensation Committee and communicated to each Covered Executive at the beginning of each performance period and (iii) no bonuses shall be paid to Covered Executives unless and until the Compensation Committee makes a determination with respect to the attainment of the performance targets relating to the Corporate Performance Goals. Notwithstanding the foregoing, the Compensation Committee may adjust bonuses payable under the Incentive Plan based on achievement of one or more individual performance objectives or pay bonuses (including, without limitation, discretionary bonuses) to Covered Executives under the Incentive Plan based on individual performance goals and/or upon such other terms and conditions as the Compensation Committee may in its discretion determine.

(e) Individual Target Bonuses. The Compensation Committee shall establish a target bonus opportunity for each Covered Executive for each performance period. For each Covered Executive, the Compensation Committee shall have the authority to apportion the target award so that a portion of the target award shall be tied to attainment of Corporate Performance Goals and a portion of the target award shall be tied to attainment of individual performance objectives.

(f) Employment Requirement. Subject to any additional terms contained in a written agreement between the Covered Executive and the Company, the payment of a bonus to a Covered Executive with respect to a performance period shall be conditioned upon the Covered Executive's employment by the Company on the bonus payment date. If a Covered Executive was not employed for an entire performance period, the Compensation Committee may pro rate the bonus based on the number of days employed during such period.

5. Timing of Payment

(a) With respect to Corporate Performance Goals established and measured on a basis more frequently than annually (e.g., quarterly or semi-annually), the Corporate Performance Goals will be measured at the end of each performance period after the Company's financial reports with respect to such period(s) have been published, as applicable. If the Corporate Performance Goals and/or individual goals for such period are met, payments will be made as soon as practicable following the end of such period, but not later than two and one-half months after the end of the fiscal year in which such performance period ends.

(b) With respect to Corporate Performance Goals established and measured on an annual or multi-year basis, Corporate Performance Goals will be measured as of the end of each such performance period (e.g., the end of each fiscal year) after the Company's financial reports with respect to such period(s) have been published, as applicable. If the Corporate Performance Goals and/or individual goals for any such period are met, bonus payments will be made as soon as practicable, but not later than two and one-half months after the end of the relevant fiscal year.

(c) For the avoidance of doubt, bonuses earned at any time in a fiscal year must be paid no later than two and one-half months after the last day of such fiscal year.

6. Amendment and Termination

The Company reserves the right to amend or terminate the Incentive Plan at any time in its sole discretion.

7. Company Recoupment Rights

A Covered Executive's rights with respect to any award granted pursuant to the Incentive Plan shall in all events be subject to reduction, cancellation, forfeiture or recoupment to the extent necessary to comply with (i) any right that the Company may have under any Company clawback, forfeiture or recoupment policy as in effect from time to time or other agreement or arrangement with a Covered Executive, or (ii) applicable law.

Adopted October 1, 2024, subject to effectiveness of the Company's Registration Statement on Form S-1.

SEPTERNA, INC.

COMPENSATION RECOVERY POLICY

Adopted as of October 1, 2024, subject to effectiveness of the Company's Registration Statement on Form S-1 for its initial public offering.

Septerna, Inc., a Delaware corporation (the "Company"), has adopted a Compensation Recovery Policy (this "Policy") as described below.

1. Overview

The Policy sets forth the circumstances and procedures under which the Company shall recover Erroneously Awarded Compensation from Covered Persons (as defined below) in accordance with rules issued by the United States Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Nasdaq Global Market. Capitalized terms used and not otherwise defined herein shall have the meanings given in Section 3 below.

2. Compensation Recovery Requirement

In the event the Company is required to prepare a Financial Restatement, the Company shall recover reasonably promptly all Erroneously Awarded Compensation with respect to such Financial Restatement.

3. Definitions

a. "Applicable Recovery Period" means the three completed fiscal years immediately preceding the Restatement Date for a Financial Restatement. In addition, in the event the Company has changed its fiscal year: (i) any transition period of less than nine months occurring within or immediately following such three completed fiscal years shall also be part of such Applicable Recovery Period and (ii) any transition period of nine to 12 months will be deemed to be a completed fiscal year.

b. "Applicable Rules" means any rules or regulations adopted by the Exchange pursuant to Rule 10D-1 under the Exchange Act and any applicable rules or regulations adopted by the SEC pursuant to Section 10D of the Exchange Act.

c. "Board" means the Board of Directors of the Company.

d. "Committee" means the Compensation Committee of the Board or, in the absence of such committee, a majority of independent directors serving on the Board.

e. "Covered Person" means any Executive Officer. A person's status as a Covered Person with respect to Erroneously Awarded Compensation shall be determined as of the time of receipt of such Erroneously Awarded Compensation regardless of the person's current role or status with the Company (e.g., if a person began service as an Executive Officer after the beginning of an Applicable Recovery Period, that person would not

be considered a Covered Person with respect to Erroneously Awarded Compensation received before the person began service as an Executive Officer, but would be considered a Covered Person with respect to Erroneously Awarded Compensation received after the person began service as an Executive Officer where such person served as an Executive Officer at any time during the performance period for such Erroneously Awarded Compensation).

f. "Effective Date" means the date of effectiveness of the Company's Registration Statement on Form S-1 for its initial public offering.

g. "Erroneously Awarded Compensation" means the amount of any Incentive-Based Compensation received by a Covered Person on or after the Effective Date and during the Applicable Recovery Period that exceeds the amount that otherwise would have been received by the Covered Person had such compensation been determined based on the restated amounts in a Financial Restatement, computed without regard to any taxes paid. Calculation of Erroneously Awarded Compensation with respect to Incentive-Based Compensation based on stock price or total shareholder return, where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in a Financial Restatement, shall be based on a reasonable estimate of the effect of the Financial Restatement on the stock price or total shareholder return upon which the Incentive-Based Compensation was received, and the Company shall maintain documentation of the determination of such reasonable estimate and provide such documentation to the Exchange in accordance with the Applicable Rules. Incentive-Based Compensation is deemed received, earned or vested when the Financial Reporting Measure is attained, not when the actual payment, grant or vesting occurs.

h. "Exchange" means the Nasdaq Global Market.

i. "Executive Officer" means any person who served the Company in any of the following roles at any time during the performance period applicable to Incentive-Based Compensation and received Incentive-Based Compensation after beginning service in any such role (regardless of whether such Incentive-Based Compensation was received during or after such person's service in such role): the president, principal financial officer, principal accounting officer (or if there is no such accounting officer the controller), any vice president in charge of a principal business unit, division or function (such as sales, administration or finance), any other officer who performs a policy making function or any other person who performs similar policy making functions for the Company. Executive officers of parents or subsidiaries of the Company may be deemed executive officers of the Company if they perform such policy making functions for the Company.

j. "Financial Reporting Measures" mean measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, any measures that are derived wholly or in part from such measures (including, for example, a non-GAAP financial measure), and stock price and total shareholder return.

k. "Financial Restatement" means a restatement of previously issued financial statements of the Company due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required restatement to correct an error in previously-issued financial statements that is material to the previously-issued financial statements or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

l. "Incentive-Based Compensation" means any compensation provided, directly or indirectly, by the Company or any of its subsidiaries that is granted, earned or vested based, in whole or in part, upon the attainment of a Financial Reporting Measure. For avoidance of doubt, Incentive-Based Compensation is "received" for purposes of this Policy in the fiscal period during which the Financial Reporting Measure specified in the Incentive-Based Compensation award is attained, even if the payment or grant of such Incentive-Based Compensation occurs after the end of that period.

m. "Restatement Date" means, with respect to a Financial Restatement, the earlier to occur of: (i) the date the Board concludes, or reasonably should have concluded, that the Company is required to prepare the Financial Restatement or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare the Financial Restatement.

4. Exception to Compensation Recovery Requirement

The Company may elect not to recover Erroneously Awarded Compensation pursuant to this Policy if the Committee determines that recovery would be impracticable, and one or more of the following conditions, together with any further requirements set forth in the Applicable Rules, are met: (i) the direct expense paid to a third party, including outside legal counsel, to assist in enforcing this Policy would exceed the amount to be recovered, and the Company has made a reasonable attempt to recover such Erroneously Awarded Compensation; or (ii) recovery would likely cause an otherwise tax-qualified retirement plan to fail to be so qualified under applicable regulations.

5. Tax Considerations

To the extent that, pursuant to this Policy, the Company is entitled to recover any Erroneously Awarded Compensation that is received by a Covered Person, the gross amount received (i.e., the amount the Covered Person received, or was entitled to receive, before any deductions for tax withholding or other payments) shall be returned by the Covered Person.

6. Method of Compensation Recovery

The Committee shall determine, in its sole discretion, the method for recovering Erroneously Awarded Compensation hereunder, which may include, without limitation, any one or more of the following:

a. requiring reimbursement of cash Incentive-Based Compensation previously paid;

b. seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer or other disposition of any equity-based awards;

c. cancelling or rescinding some or all outstanding vested or unvested equity-based awards;

d. adjusting or withholding from unpaid compensation or other set-off;

e. cancelling or offsetting against planned future grants of equity-based awards; and/or

f. any other method permitted by applicable law or contract.

The Committee need not utilize the same method of recovery for all Covered Persons or with respect to all types of Erroneously Awarded Compensation.

Notwithstanding the foregoing, a Covered Person will be deemed to have satisfied such person's obligation to return Erroneously Awarded Compensation to the Company if such Erroneously Awarded Compensation is returned in the exact same form in which it was received; provided that equity withheld to satisfy tax obligations will be deemed to have been received in cash in an amount equal to the tax withholding payment made.

In the event the Company is required to recover Erroneously Awarded Compensation from a Covered Person who is no longer an employee, the Company is entitled to seek such recovery in order to comply with applicable law, regardless of the terms of any release of claims or separation agreement such individual may have signed.

7. Policy Interpretation

This Policy shall be interpreted in a manner that is consistent with the Applicable Rules and any other applicable law. The Committee shall take into consideration any applicable interpretations and guidance of the SEC in interpreting this Policy, including, for example, in determining whether a financial restatement qualifies as a Financial Restatement hereunder. To the extent the Applicable Rules require recovery of Incentive-Based Compensation in additional circumstances besides those specified above, nothing in this Policy shall be deemed to limit or restrict the right or obligation of the Company to recover Incentive-Based Compensation to the fullest extent required by the Applicable Rules.

8. Policy Administration

This Policy shall be administered by the Committee; provided, however, that the Board shall have exclusive authority to authorize the Company to prepare a Financial Restatement. In doing so, the Board may rely on a recommendation of the Audit Committee of the Board. The Committee shall have such powers and authorities related to the administration of this Policy as are consistent with the governing documents of the Company and applicable law. The Committee shall have full power and authority to take, or direct the taking of, all actions and to make all determinations required or provided for under this Policy and shall have full power and authority to take, or direct the taking of, all such other actions and make all such other determinations not inconsistent with the specific terms and provisions of this Policy that the Committee deems to be necessary or appropriate to the administration of this Policy. The interpretation and construction by the Committee of any provision of this Policy and all determinations made by the Committee under this policy shall be final, binding and conclusive.

9. Compensation Recovery Repayments not Subject to Indemnification

Notwithstanding anything to the contrary set forth in any agreement with, or the organizational documents of, the Company or any of its subsidiaries, Covered Persons are not entitled to indemnification for Erroneously Awarded Compensation or for any losses arising out of or in any way related to Erroneously Awarded Compensation recovered under this Policy.

11. No Impairment of Other Remedies

Nothing contained in this Policy, and no recoupment or recovery as contemplated herein, shall limit any claims, damages or other legal remedies the Company or any of its affiliates may have against a Covered Person arising out of or resulting from any actions or omissions by the Covered Person. This Policy does not preclude the Company from taking any other action to enforce a Covered Person's obligations to the Company, including, without limitation, termination of employment and/or institution of civil proceedings. This Policy is in addition to the requirements of Section 304 of the Sarbanes-Oxley Act of 2002 ("SOX 304") that are applicable to the Company's Chief Executive Officer and Chief Financial Officer and to any other compensation recoupment policy and/or similar provisions in any employment, equity plan, equity award, or other individual agreement, to which the Company is a party or which the Company has adopted or may adopt and maintain from time to time; provided, however, that compensation recouped pursuant to this Policy shall not be duplicative of compensation recouped pursuant to SOX 304 or any such compensation recoupment policy and/or similar provisions in any such employment, equity plan, equity award, or other individual agreement except as may be required by law.

12. Recovery Requirement Shall not Constitute "Good Reason" Under Employment or Other Compensation Agreements

Any action by the Company to recoup or any recoupment of Erroneously Awarded Compensation under this Policy from a Covered Person shall not be deemed (i) "good reason" for such Covered Person's resignation or to serve as a basis for a claim of constructive termination under any employment or severance agreement with the Company or under the terms of any benefits or compensation arrangement applicable to such Covered Person, or (ii) to constitute a breach of a contract or other arrangement to which such Covered Person is party.

13. Amendment; Termination

The Committee may amend this Policy in its discretion, including as it deems necessary to comply with the regulations adopted by the SEC under Rule 10D-1 and the rules of any national securities exchange or national securities association on which the Company's securities are listed. The Committee may terminate this Policy at any time. Notwithstanding anything herein to the contrary, no amendment or termination of this Policy shall be effective if that amendment or termination would cause the Company to violate any federal securities laws, SEC rules or the rules of any national securities exchange or national securities association on which the Company's securities are listed.

14. Successors

This Policy shall be binding and enforceable against all Covered Executives and their successors, beneficiaries, heirs, executors, administrators, or other legal representatives.

* * *

ACKNOWLEDGMENT

(to be signed by all Covered Persons)

I, the undersigned, agree and acknowledge that I am fully bound by, and subject to, all of the terms and conditions of the Septerna, Inc. Compensation Recovery Policy (as may be amended, restated, supplemented or otherwise modified from time to time, the "Policy") and that I have been provided a copy of the Policy. In the event of any inconsistency between the Policy and the terms of any employment or similar agreement to which I am a party, or the terms of any compensation plan, program or agreement under which any compensation has been granted, awarded, earned or paid, the terms of the Policy shall govern. If the Committee determines that any amounts granted, awarded, earned or paid to me must be forfeited or reimbursed to the Company, I will promptly take any action necessary to effectuate such forfeiture and/or reimbursement.

Name:

SEPTERNA, INC.

EXECUTIVE SEVERANCE PLAN

1. Purpose. Septerna, Inc., a Delaware corporation (the "Company") considers it essential to the best interests of its stockholders to foster the continuous employment of key management personnel. The Board of Directors of the Company (the "Board") recognizes, however, that, as is the case with many publicly-held corporations, the possibility of an involuntary termination of employment, either before or after a Change in Control (as defined in Section 2 hereof), exists and that such possibility, and the uncertainty and questions that it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its stockholders. Therefore, the Board has determined that the Septerna, Inc. Executive Severance Plan (the "Plan") should be adopted to reinforce and encourage the continued attention and dedication of the Company's Covered Executives (as defined in Section 2 hereof) to their assigned duties without distraction. Nothing in this Plan shall be construed as creating an express or implied contract of employment and nothing shall alter the "at will" nature of the Covered Executives' employment with the Company.

2. Definitions. The following terms shall be defined as set forth below:

(a) *"Accounting Firm"* shall mean a nationally recognized accounting firm selected by the Company.

(b) *"Administrator"* means the Board or the Compensation Committee of the Board.

(c) "*Base Salary*" shall mean the higher of (i) the annual base salary in effect immediately prior to the Date of Termination or (ii) the annual base salary in effect for the year immediately prior to the year in which the Date of Termination occurs.

(d) "*Cause*" shall mean, and shall be limited to, the occurrence of any one or more of the following events:

(i) the Covered Executive's unauthorized use or disclosure of the Company's confidential information or trade secrets;

(ii) the Covered Executive's material breach of any agreement between the Covered Executive and the Company;

(iii) the Covered Executive's material failure to comply with the Company's written policies or rules;

(iv) conduct by the Covered Executive constituting a material act of misconduct in connection with the performance of his or her duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary and de minimis use of Company property for personal purposes;

(v) the Covered Executive's continued willful non-performance of his or her assigned duties (other than by reason of his or her physical or mental illness, incapacity or Disability) after receiving written notification of the non-performance from the Board for the Tier 1 Executive and the Company's Chief Executive Officer for the Tier 2 Executives and the Tier 3 Executives, and, if curable, a period of thirty (30) days to cure such non-performance;

(vi) the Covered Executive's commission of (A) any felony; or (B) a misdemeanor involving moral turpitude, deceit, dishonesty or fraud;

(vii) any conduct by the Covered Executive that would reasonably be expected to result in material injury or material reputational harm to the Company or any of its subsidiaries and affiliates if the Covered Executive were retained;

(viii) the Covered Executive's failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested the Covered Executive's cooperation, or the Covered Executive's willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

(e) "*Change in Control*" shall mean a Sale Event, as defined in the Septerna, Inc. 2024 Stock Option and Incentive Plan, as amended from time to time.

(f) "*Change in Control Period*" shall mean the period beginning on the date three months prior to a Change in Control and ending on the one-year anniversary of the Change in Control.

(g) *"Code"* shall mean the Internal Revenue Code of 1986, as amended.

(h) "*Covered Executives*" shall mean Tier 1 Executive and those other employees designated by the Administrator in its sole discretion as the Tier 2 Executives and the Tier 3 Executives, and, in each case, who meet the eligibility requirements set forth in Section 4 of the Plan.

(i) "*Date of Termination*" shall mean the date that a Covered Executive's employment with the Company (or any successor) ends, which date shall be specified in the Notice of Termination. Notwithstanding the foregoing, a Covered Executive's employment shall not be deemed to have been terminated solely as a result of the Covered Executive becoming an employee of any direct or indirect successor to the business or assets of the Company.

(j) "*Disability*" shall mean the following: if through any illness, injury, accident or condition of either a physical or psychological nature, the Covered Executive becomes unable to perform substantially all of his duties and responsibilities for a continuous period of sixteen (16) consecutive weeks or for any twenty-six (26) weeks within a fifty-two (52) week period. Determinations as to whether Covered Executive is Disabled shall be made by a physician selected by the Board or its insurers and acceptable to the Covered Executive or the Covered Executive's legal representative, such agreement as to acceptability not to be unreasonably withheld or delayed.

(k) *"Good Reason"* shall mean that the Covered Executive has complied with the "Good Reason Process" following the occurrence of any of the following events without the Covered Executive's written consent:

(i) a material diminution in the Covered Executive's annual base salary other than across the board decreases in annual base salary similarly affecting all executives of the Company;

(ii) the Company requiring the Covered Executive to relocate (other than for travel incident to the Covered Executive's performance of his or her duties on behalf of the Company), without the Covered Executive's consent, a distance of more than fifty (50) miles from the Covered Executive's current principal place of business;

(iii) any material diminution in the Covered Executive's position, responsibilities, authority or duties; or

(iv) the Company's material breach of any agreement between the Covered Executive and the Company.

For purposes of Section 2(k)(iii), a change in the reporting relationship, or a change in a title will not, by itself, be sufficient to constitute a material diminution of responsibilities, authority or duty.

(l) "*Good Reason Process*" shall mean:

(i) the Covered Executive reasonably determines in good faith that a "Good Reason" condition has occurred;

(ii) the Covered Executive notifies the Company in writing of the first occurrence of the Good Reason condition within sixty (60) days of the first occurrence of such condition;

(iii) the Covered Executive cooperates in good faith with the Company's efforts, for a period of not less than thirty (30) days following such notice (the "Cure Period"), to remedy the condition;

(iv) notwithstanding such efforts, the Good Reason condition continues to exist following the Cure Period; and

(v) the Covered Executive terminates his or her employment and provides the Company with a Notice of Termination with respect to such termination, each within sixty (60) days after the end of the Cure Period.

If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

(m) "*Notice of Termination*" shall mean a written notice which shall indicate the specific termination provision in this Plan relied upon for the termination of a Covered Executive's employment and the Date of Termination.

(n) *"Participation Agreement"* shall mean an agreement between a Covered Executive and the Company that acknowledges the Covered Executive's participation in the Plan.

(o) *"Qualified Termination Event"* shall mean (i) a termination of the Covered Executive's employment by the Company other than for Cause, death or Disability or (ii) the Covered Executive's resignation from the Company for Good Reason.

(p) "*Restrictive Covenants Agreements*" shall mean the Employee Confidentiality, Assignment and Nonsolicitation Agreement (or similar agreements entered into between the Covered Executive and the Company).

(q) "*Target Bonus*" shall mean the Covered Executive's target annual cash incentive compensation in effect immediately prior to the Date of Termination (or immediately prior to the Change in Control, if higher).

(r) "*Tier 1 Executive*" shall mean the Company's Chief Executive Officer.

(s) "*Tier 2 Executives*" shall mean the individuals designated as such by the Administrator and who are listed in Exhibit A, attached hereto, as such exhibit is amended by the Administrator from time to time.

(t) "*Tier 3 Executives*" shall mean the individuals designated as such by the Administrator who are listed in Exhibit B, attached hereto, as such exhibit is amended by the Administrator from time to time.

3. Administration of the Plan.

(a) Administrator. The Plan shall be administered by the Administrator.

(b) Powers of Administrator. The Administrator shall have all powers necessary to enable it properly to carry out its duties with respect to the complete control of the administration of the Plan. Not in limitation, but in amplification of the foregoing, the Administrator shall have the power and authority in its discretion to:

(i) construe the Plan to determine all questions that shall arise as to interpretations of the Plan's provisions;

(ii) determine which individuals are and are not Covered Executives, designate an individual as a Tier 2 Executive or a Tier 3 Executive, determine the benefits to which any Covered Executives may be entitled, the eligibility requirements for participation in the Plan and all other matters pertaining to the Plan;

(iii) adopt amendments to the Plan which are deemed necessary or desirable to comply with all applicable laws and regulations, including but not limited to Code Section 409A and the guidance thereunder;

(iv) make all determinations it deems advisable for the administration of the Plan, including the authority and ability to delegate administrative functions to a third party;

(v) decide all disputes arising in connection with the Plan; and

(vi) otherwise supervise the administration of the Plan.

(c) All decisions and interpretations of the Administrator shall be binding on all persons, including the Company and Covered Executives.

4. Eligibility. All Covered Executives who have executed and submitted to the Company a Participation Agreement, and satisfied such other requirements as may be determined by the Administrator, are eligible to participate in the Plan. The Administrator may determine at any time that a Covered Executive should no longer be designated as such as a result of a material change in such Covered Executive's role, and such individual shall cease to be eligible to participate in the Plan upon the Administrator taking action by resolution to update the applicable Exhibit hereto.

5. Termination Benefits Generally. In the event a Covered Executive's employment with the Company is terminated for any reason, the Company shall pay or provide to the Covered Executive any earned but unpaid salary, unpaid expense reimbursements in accordance with Company policy, accrued but unused vacation or leave entitlement, and any vested benefits the Covered Executive may have under any employee benefit plan of the Company in accordance with the terms and conditions of such employee benefit plan (collectively, the "Accrued Benefits"), within the time required by law but in no event more than sixty (60) days after the Date of Termination.

6. Termination Not in Connection with a Change in Control. In the event a Qualified Termination Event occurs at any time other than during the Change in Control Period, with respect to such Covered Executive, in addition to the Accrued Benefits, subject to his or her execution of a separation agreement in a form and manner satisfactory to the Company containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, non-disparagement and reaffirmation of the Restrictive Covenants Agreements (the "Separation Agreement and Release") and the Separation Agreement and Release becoming irrevocable, all within the time period set forth in the Separation Agreement and Release but in no event more than sixty (60) days after the Date of Termination, and subject to the Covered Executive complying with the Separation Agreement and Release, the Company shall:

(a) pay the Covered Executive an amount equal to 12 months' Base Salary for the Tier 1 Executive, 9 months' Base Salary for each Tier 2 Executive, and 6 months' Base Salary for each Tier 3 Executive; and

(b) if the Covered Executive was participating in the Company's group health plan immediately prior to the Date of Termination and elects COBRA health continuation, then the Company shall pay to the group health plan provider or the COBRA provider a monthly cash payment in an amount equal to the monthly employer contribution that the Company would have

made to provide health insurance to the Covered Executive if the Covered Executive had remained employed by the Company, based on the premiums as of the Date of Termination, until the earliest of (i) 12 months for the Tier 1 Executive, 9 months for each Tier 2 Executive, and 6 months for each Tier 3 Executive, (ii) the date that the Covered Executive becomes eligible for group medical plan benefits under any other employer's group medical plan, or (iii) the cessation of the Covered Executive's health continuation rights under COBRA; provided, however, that if the Company determines that it cannot pay such amounts to the group health plan provider or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to the Covered Executive for the time period specified above. Such payments to the Covered Executive shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under Section 6(a) and (b), as applicable, shall be paid out in a substantially equal installments in accordance with the Company's payroll practice over 12 months for the Tier 1 Executive, 9 months for each Tier 2 Executive, and 6 months for each Tier 3 Executive, commencing within sixty (60) days after the Date of Termination; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, such payments, to the extent they qualify as "non-qualified deferred compensation" within the meaning of Section 409A of the Code, shall begin to be paid in the second calendar year no later than the last day of such 60-day period; provided further, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination.

7. Termination in Connection with a Change in Control. In the event a Qualified Termination Event occurs within the Change in Control Period, then with respect to such Covered Executive, in addition to the Accrued Benefits, subject to his or her execution and non-revocation of the Separation Agreement and Release, all within the time period set forth in the Separation Agreement and Release, but in no event more than sixty (60) days after the Date of Termination, the Company shall:

(a) cause 100% of the outstanding and unvested equity awards with time-based vesting held by the Covered Executive to immediately become fully vested, exercisable or nonforfeitable as of the Date of Termination or Change in Control, if later; provided, that any outstanding and unvested equity awards subject to performance conditions will vest pursuant to the terms of the applicable award agreement. Notwithstanding the foregoing, in the event of a Change in Control where the parties to such Change in Control do not provide for the assumption, continuation or substitution of equity awards of the Company, any and all outstanding and unvested equity awards held by the Covered Executive shall be subject to Section 3(d) of the Company's 2024 Stock Option and Incentive Plan, as amended from time to time;

(b) pay to the Covered Executive an amount equal to the sum of (i) 18 months' of Base Salary for the Tier 1 Executive, 12 months' of Base Salary for each Tier 2 Executive, and 9 months' of Base Salary for each Tier 3 Executive, and (ii) 1.5x Target Bonus for the Tier 1 Executive, 1.0x Target Bonus for each Tier 2 Executive and 0.75x Target Bonus for each Tier 3 Executive; and

(c) if the Covered Executive was participating in the Company's group health plan immediately prior to the Date of Termination and elects COBRA health continuation, then the Company shall pay to the group health plan provider or the COBRA provider a monthly cash payment in an amount equal to the monthly employer contribution that the Company would have made to provide health insurance to the Covered Executive if the Covered Executive had remained employed by the Company, based on the premiums as of the Date of Termination, until the earliest of (i) 18 months for the Tier 1 Executive, 12 months for each Tier 2 Executive, and 9 months for each Tier 3 Executive, (ii) the date that the Covered Executive becomes eligible for group medical plan benefits under any other employer's group medical plan, or (iii) the cessation of the Covered Executive's health continuation rights under COBRA; provided, however, that if the Company determines that it cannot pay such amounts to the group health plan provider or the COBRA provider (if applicable) without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then the Company shall convert such payments to payroll payments directly to the Covered Executive for the time period specified above. Such payments to the Covered Executive shall be subject to tax-related deductions and withholdings and paid on the Company's regular payroll dates.

The amounts payable under Section 7(b) shall be paid out in a lump sum within sixty (60) days after the Date of Termination (or Change in Control, as applicable) and the amounts payable under Section 7(c), as applicable, shall be paid out in a substantially equal installments in accordance with the Company's payroll practice over 18 months for the Tier 1 Executive, 12 months for each Tier 2 Executive, and 9 months for each Tier 3 Executive, commencing within sixty (60) days after the Date of Termination; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, such payments, to the extent they qualify as "non-qualified deferred compensation" within the meaning of Section 409A of the Code, shall be paid or begin to be paid, as applicable, in the second calendar year no later than the last day of the 60-day period; provided further, that if applicable, the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. For the avoidance of doubt, the severance pay and benefits provided in this Section 7 shall apply in lieu of, and expressly supersede, the provisions of Section 6 and no Covered Executive shall be entitled to the severance pay and benefits under both Section 6 and 7 hereof.

8. Additional Limitation.

(a) Anything in this Plan to the contrary notwithstanding, in the event that the amount of any compensation, payment or distribution by the Company to or for the benefit of the Covered Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Plan or otherwise, calculated in a manner consistent with Section 280G of the Code and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which the Covered Executive becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Covered Executive receiving a higher After Tax Amount (as defined below) than the Covered Executive would receive if the Aggregate Payments were not subject to such reduction. In the event of such reduction, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (i) cash payments

not subject to Section 409A of the Code; (ii) cash payments subject to Section 409A of the Code; (iii) equity-based payments and acceleration; and (iv) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c).

(b) For purposes of this Section 8, the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Covered Executive as a result of the Covered Executive's receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Covered Executive shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes (if any) which could be obtained from deduction of such state and local taxes.

(c) The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 8(a) shall be made by the Accounting Firm, which shall provide detailed supporting calculations both to the Company and the Covered Executive within fifteen (15) business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Covered Executive. Any determination by the Accounting Firm shall be binding upon the Company and the Covered Executive.

9. Restrictive Covenants Agreements.

As a condition to participating in the Plan, each Covered Executive shall continue to comply with the terms and conditions contained in the Restrictive Covenants Agreements (or similar agreements entered into between the Covered Executive and the Company) and such other agreement(s) as designated in the applicable Participation Agreement. If a Covered Executive has not entered into the Restrictive Covenants Agreements (or similar agreements with the Company), he or she shall enter into such agreements prior to participating in the Plan.

10. Withholding. All payments made by the Company under this Plan shall be subject to any tax or other amounts required to be withheld by the Company under applicable law.

11. Section 409A.

(a) Anything in this Plan to the contrary notwithstanding, if at the time of the Covered Executive's "separation from service" within the meaning of Section 409A of the Code, the Company determines that the Covered Executive is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Covered Executive becomes entitled to under this Plan would be considered deferred compensation subject to the twenty (20) percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (i) six (6) months and one (1) day after the Covered Executive's separation from service, or (ii) the Covered Executive's death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) The parties intend that this Plan will be administered in accordance with Section 409A of the Code and that all amounts payable hereunder shall be exempt from the requirements of such section as a result of being "short term deferrals" for purposes of Section 409A of the Code to the greatest extent possible. To the extent that any provision of this Plan is not exempt from Section 409A of the Code and ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner to comply with Section 409A of the Code. Each payment pursuant to this Plan is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). The parties agree that this Plan may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(c) To the extent that any payment or benefit described in this Plan constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Covered Executive's termination of employment, then such payments or benefits shall be payable only upon the Covered Executive's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) All in-kind benefits provided and expenses eligible for reimbursement under this Plan shall be provided by the Company or incurred by the Covered Executive during the time periods set forth in this Plan. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(e) The Company makes no representation or warranty and shall have no liability to the Covered Executive or any other person if any provisions of this Plan are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

12. Notice and Date of Termination.

(a) Notice of Termination. A termination of the Covered Executive's employment shall be communicated by Notice of Termination from the Company to the Covered Executive or vice versa in accordance with this Section 12.

(b) Notice to the Company. Any notices, requests, demands, and other communications provided for by this Plan shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid, to a Covered Executive at the last address the Covered Executive has filed in writing with the Company, or to the Company at the following physical or email address:

Septerna, Inc.
Attention: Samira Shaikhly
Chief People Officer
250 E Grand Avenue
South San Francisco, CA 94080

13. No Mitigation. The Covered Executive is not required to seek other employment or to attempt in any way to reduce any amounts payable to the Covered Executive by the Company under this Plan.

14. Benefits and Burdens. This Plan shall inure to the benefit of and be binding upon the Company and the Covered Executives, their respective successors, executors, administrators, heirs and permitted assigns. In the event of a Covered Executive's death after a termination of employment but prior to the completion by the Company of all payments due to him or her under this Plan, the Company shall continue such payments to the Covered Executive's beneficiary designated in writing to the Company prior to his or her death (or to his or her estate, if the Covered Executive fails to make such designation).

15. Enforceability. If any portion or provision of this Plan shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Plan, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Plan shall be valid and enforceable to the fullest extent permitted by law.

16. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Plan, or the waiver by any party of any breach of this Plan, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

17. Non-Duplication of Benefits and Effect on Other Plans. Unless otherwise specified in a Covered Executive's Participation Agreement, notwithstanding any other provision in the Plan to the contrary, the benefits provided hereunder shall be in lieu of any other severance payments and/or benefits provided by the Company, including any such payments and/or benefits pursuant to an employment agreement or offer letter between the Company and the Covered Executive, other than as provided in Section 3(d) of the Company's 2024 Stock Option and Incentive Plan, as amended from time to time.

18. No Contract of Employment. Nothing in this Plan shall be construed as giving any Covered Executive any right to be retained in the employ of the Company or shall affect the terms and conditions of a Covered Executive's employment with the Company.

19. Amendment or Termination of Plan. The Company may amend or terminate this Plan at any time or from time to time, but no such action shall adversely affect the rights of any Covered Executive without the Covered Executive's written consent.

20. Governing Law. This Plan shall be construed under and be governed in all respects by the laws of the State of Delaware, without giving effect to the conflict of laws principles.

21. Obligations of Successors. In addition to any obligations imposed by law upon any successor to the Company, any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company shall expressly assume and agree to perform this Plan in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

22. Effectiveness and Term. The Executive Severance Plan is effective as of the date upon which the registration statement on Form S-1 that is filed by the Company with respect to its initial public offering is declared effective by the Securities and Exchange Commission.

Exhibit A

Tier 2 Executives

Individual	***Title***
Liz Bhatt, M.S., M.B.A.	Chief Operating Officer
Jae B. Kim, M.D.	Chief Medical Officer

Exhibit B

Tier 3 Executives

Individual	***Title***
Samira Shaikhly	Chief People Officer
Daniel Long	Senior Vice President, Drug Discovery
Uwe Klein	Senior Vice President, Biological Sciences

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated August 2, 2024 (except for the eleventh paragraph of Note 1, as to which the date is October 21, 2024), in Amendment No. 1 to the Registration Statement (Form S-1 No. 333-282469) and related Prospectus of Septerna, Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

San Mateo, California
October 21, 2024

Exhibit 107

Calculation of Filing Fee Table

Form S-1
(Form Type)

Septerna, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price[1]	Fee Rate	Amount of Registration Fee
Fees to be Paid	Equity	Common Stock, par value $0.001 per share	457(a)	12,578,125[1]	$17.00[2]	$213,828,125.00	$0.00015310	$32,737.09
Fees Previously Paid	Equity	Common Stock, par value $0.001 per share	457(a)			$100,000,000.00	$0.00015310	$15,310.00
	Total Offering Amounts					$213,828,125.00		$32,737.09
	Total Fees Previously Paid							$15,310.00
	Total Fee Offsets							—
	Net Fee Due							$17,427.09

(1) Includes 1,640,625 shares that the underwriters have the option to purchase.
(2) Estimated solely for the purpose of computing the registration fee in accordance with Rule 457(a) under the Securities Act of 1933, as amended.