

As confidentially submitted to the Securities and Exchange Commission on October 23, 2020.
This Amendment No. 1 to the confidential draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Olema Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

81-2154263
(I.R.S. Employer
Identification Number)

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

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 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, 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 Exchange Act.

Large accelerated filer Non-accelerated filer 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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Proposed maximum aggregate offering price(1)(2) | Amount of registration fee(2) |
|---|---|----------------------------------|
| Common stock, par value \$0.0001 per share | \$ | \$ |

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) of the Securities Act of 1933, as amended. Includes the aggregate offering price of any additional shares that the underwriters have the option to purchase.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file 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.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated _____, 2020

Preliminary Prospectus

shares



Common stock

This is an initial public offering of shares of common stock by Olema Pharmaceuticals, Inc. We are offering _____ shares of our common stock to be sold in the offering. The initial public offering price is expected to be between \$ _____ and \$ _____ per share.

Prior to this offering, there has been no public market for our common stock. We have applied to list our common stock on The Nasdaq Global Market under the symbol "OLMA."

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced reporting requirements.

| | Per share | Total |
|--|-----------|----------|
| Initial public offering price | \$ _____ | \$ _____ |
| Underwriting discounts and commissions(1) | \$ _____ | \$ _____ |
| Proceeds to Olema Pharmaceuticals, Inc., before expenses | \$ _____ | \$ _____ |

(1) See the section titled "Underwriting" beginning on page [184](#) for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to _____ additional shares of common stock at the initial public offering price, less the underwriting discounts and commissions.

Investing in our common stock involves a high degree of risk. See the section titled "Risk Factors" beginning on page [11](#).

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

The underwriters expect to deliver the shares to purchasers on or about _____, 2020.

J.P. Morgan Jefferies Cowen Canaccord Genuity

_____, 2020

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Through and including _____, 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Neither we nor the underwriters have authorized anyone to provide you any information or make any representations other than those contained in this prospectus or in 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. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or in 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.

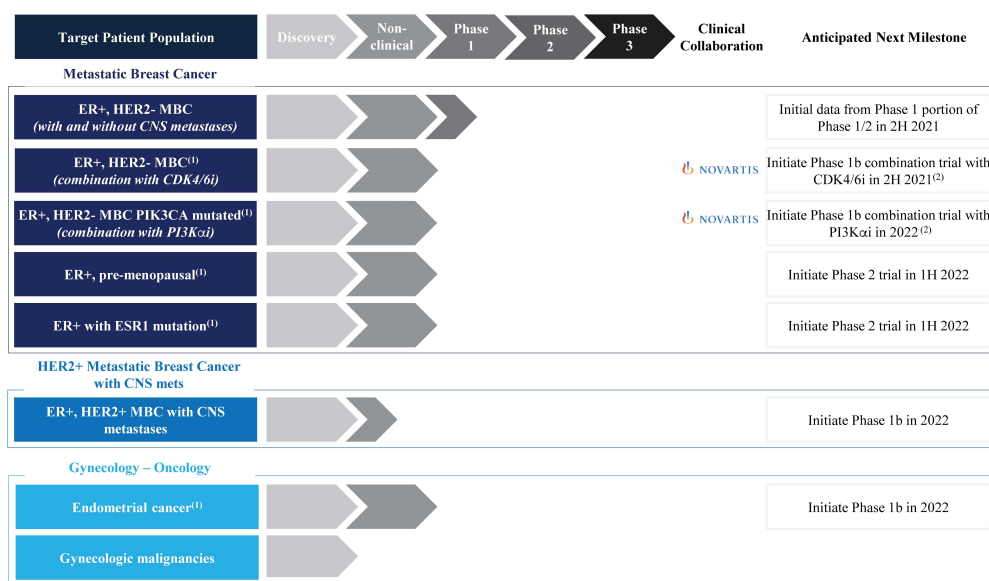
For investors outside of the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United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

Prospectus summary

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, including the sections in this prospectus titled "Risk Factors," "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, before making an investment decision. Unless otherwise indicated, all references in this prospectus to "Olema," the "company," "we," "our," "us" or similar terms refer to Olema Pharmaceuticals, Inc.

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of next generation targeted therapies for women's cancers. Our team has spent the past decade characterizing the structure and function of the estrogen receptor, or ER, a key driver of breast cancer in approximately 75% of patients, in order to develop more potent, oral therapies that completely inactivate this signaling pathway. Our lead product candidate, OP-1250, is a novel oral therapy with combined activity as both a complete ER antagonist, or CERAN, and a selective ER degrader, or SERD, which we believe will drive deeper, more durable responses than existing therapies. OP-1250, both as a monotherapy and in combination with inhibitors of cyclin-dependent kinase 4 and 6, or CDK4/6, demonstrated robust tumor shrinkage in several xenograft models, including a breast cancer brain metastasis model. In August 2020, we initiated an ongoing Phase 1/2 dose escalation and expansion trial evaluating OP-1250 for the treatment of recurrent, locally advanced or metastatic ER-positive, or ER+, human epidermal growth factor receptor 2-negative, or HER2-, breast cancer, and expect to report initial data from this trial in the second half of 2021. We own worldwide development and commercialization rights to OP-1250. As summarized in the figure below, our plan is to develop OP-1250 in a number of ER+ breast cancer indications, both as a monotherapy and in combination with approved targeted therapies that have shown improved outcomes with other endocrine therapies. We believe OP-1250's oral formulation and dual mechanism of action directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and position OP-1250 as a potential endocrine therapy of choice for the treatment of ER+ breast cancers. Our goal is to transform the standard of care for women living with cancers by developing more effective therapies that apply our deep understanding and collective expertise in endocrine-driven cancers, nuclear receptor activities and mechanisms of acquired resistance.



MBC = metastatic breast cancer; PI3K α = phosphatidylinositol 3-kinase alpha; RP2D = recommended Phase 2 dose. CDK4/6i = CDK4/6 inhibitor; PI3Kai = PI3K α inhibitor

⁽¹⁾ Patient population may be studied as additional cohort(s) of current Phase 1/2 clinical trial or may be studied in a separate clinical trial.

⁽²⁾ Anticipated initiation of Phase 1b is after determination of RP2D of current Phase 1/2 trial.

We are initially focused on developing therapies for the treatment of breast cancer, which represents approximately 30% of all new diagnoses of women's cancer. In 2020, the American Cancer Society, or ACS, estimates there will be approximately 276,000 new cases of female breast cancer and over 42,000 deaths from metastatic breast cancer in the United States. Treatment decisions are based on a combination of individual patient characteristics and tumor biology, most importantly the expression of three proteins: ER, progesterone receptor, or PR, and human epidermal growth factor receptor 2, or HER2. Approximately 75% of all breast cancers are ER+, and approximately 65% are ER+/HER2-, highlighting the central role of the ER in driving a large majority of breast cancer. Approximately 6-10% of breast cancer patients present with metastatic disease at diagnosis and a further 20-30% of patients initially diagnosed with early-stage disease ultimately develop metastatic disease. The current five-year survival rate for patients with ER+ metastatic breast cancer is approximately 30%. In 2019, worldwide sales for endocrine and targeted therapies treating ER+ breast cancer patients totaled \$9.6 billion.

The ER is a nuclear receptor that functions as a ligand regulated transcription factor. When bound to estrogen, the ER directs the expression of genes that are essential for breast cancer cells' survival and proliferation. For more than four decades, researchers have been developing new approaches and therapies to prevent activation of the ER pathway, thereby inhibiting the ability of the ER to drive tumor cell growth. In 1977, the first endocrine therapeutic, the anti-estrogen tamoxifen, was approved by the U.S. Food and Drug Administration, or FDA, for the treatment of breast cancer. Tamoxifen is still commonly used today but is challenged by the development of acquired drug resistance, which in some cases may be due to its partial agonist activity. In search for a different mechanism to target the estrogen pathway, aromatase inhibitors, or AIs, were developed in the 1990s to block the synthesis of estrogen and deprive ER+ cells of its activating ligand. However, up to 50% of patients taking AIs develop arthralgia, leading to suspension of treatment in up to 15% of patients. Additionally, most patients with metastatic breast cancer have been shown to ultimately develop resistance to AIs. These agents are also not used to treat pre-menopausal women without the addition of ovarian suppression.

In 2002, fulvestrant was approved as a treatment for hormone receptor positive, or HR+, metastatic breast cancer patients and is typically used as a second- or third-line endocrine agent. Fulvestrant was designed to be a CERAN, and later discovered to also be a SERD, and represented a breakthrough for the field with improved outcomes for patients whose disease had progressed on prior endocrine therapy. However, fulvestrant has several limitations including its suboptimal drug exposure and route of administration as a monthly intramuscular injection. Despite these drawbacks, fulvestrant achieved worldwide sales of over \$1.1 billion in 2019.

More recently, the field has focused on the discovery and development of oral agents that have fulvestrant's dual mechanism of action to completely inactivate and degrade the ER. Some of these oral SERD agents are CERANs, such as OP-1250, but others have partial agonist activity despite being SERDs and thus are not CERANs. SERDs reduce the levels of the ER but they do not entirely eliminate it. Consequently, SERDs are not necessarily CERANs. Notably, estrogen itself leads to ER degradation.

Our product candidate

We designed our wholly-owned, lead product candidate, OP-1250, based both on a detailed structural understanding of the ER and on known alterations to this structure induced by fulvestrant and other ligands. We have demonstrated in nonclinical studies that OP-1250 functions both as a CERAN and a SERD, but is distinguished from fulvestrant in several noteworthy ways, including:

- *OP-1250 is orally bioavailable while fulvestrant is a highly insoluble compound that must be administered monthly by intramuscular injection into the buttocks;*
- *OP-1250 has favorable biodistribution properties leading to higher drug concentrations in the plasma and tumor than those achieved with fulvestrant, as shown in a head-to-head mouse xenograft study; and*
- *OP-1250 has demonstrated the ability to shrink tumors in head-to-head nonclinical studies with fulvestrant, in contrast to fulvestrant, which has only been shown to inhibit tumor growth.*

Based on these nonclinical differences, we believe that OP-1250 has the potential to demonstrate clinical outcomes superior to fulvestrant. Furthermore, OP-1250 has the potential to benefit patients with metastatic

breast cancer, initially for patients who have previously received endocrine therapy, as well as those who are treatment naïve in the metastatic setting, and advance into the adjuvant setting for early-stage ER+ breast cancer. In multiple nonclinical animal models of anti-cancer activity, including patient-derived xenografts with tumors containing activating mutations in the ER, OP-1250 monotherapy led to tumor shrinkage or in some cases tumor eradication, as well as long-term post-treatment survival. In each of these nonclinical models, the effect of OP-1250 was superior to that of fulvestrant, an effect which we determined was driven both by improved pharmacokinetic, or PK, properties and higher plasma and tumor drug concentrations. In nonclinical studies, OP-1250 demonstrated robust central nervous system, or CNS, penetration, and in an intracranial breast cancer brain metastases xenograft study, OP-1250 demonstrated the ability to shrink tumors and improve survival in mice. OP-1250 has the potential to address a critical unmet need as 10-15% of ER+ breast cancer patients develop brain metastases for which there are currently limited treatment options.

In August 2020, we initiated a Phase 1/2 clinical trial of OP-1250 in patients with recurrent, locally advanced or metastatic ER+/HER2- breast cancer whose disease has progressed on endocrine therapy. Phase 1 consists of monotherapy dose escalation to evaluate the safety and PK of OP-1250 and to determine the maximum tolerated dose, or MTD, and/or the recommended Phase 2 dose, or RP2D. The expansion phase will enroll patients at the RP2D in order to explore preliminary efficacy in selected patient populations. The first cohort of the expansion phase will consist of women and men with recurrent, locally advanced or metastatic breast cancer whose disease has progressed on prior endocrine therapy. A second cohort is exploratory and will enroll individuals with metastatic breast cancer who have brain metastases. As of October 23, 2020, the first dose cohort, consisting of four patients, has completed enrollment and the initial 28 day dose limiting toxicity assessment period, and the second dose cohort is enrolling patients. Preliminary PK data from the first dose cohort is consistent with nonclinical modeling of our Phase 1 starting dose. We expect to report initial data from the Phase 1 portion of the trial in the second half of 2021. In addition, we plan to explore the potential clinical benefit of OP-1250 in combination with other approved agents for breast cancer, such as inhibitors of CDK4/6 and phosphatidylinositol 3-kinase alpha, or PI3K α , which have been shown to lead to improvements in both progression-free and overall survival. In July 2020, we entered into a non-exclusive agreement with Novartis Institutes for Biomedical Research, Inc., or Novartis, to evaluate the combination of OP-1250 and Novartis' ribociclib, a CDK4/6 inhibitor, as well as alpelisib, their PI3K α inhibitor. Under the terms of the collaboration, Novartis will be responsible for funding the majority of the costs for the Phase 1b clinical trial, as well as supplying their drugs.

Our team

Our Chief Technology Officer, Cyrus Harmon, Ph.D., and Chief Scientific Officer, Peter Kushner, Ph.D., co-founded the company in 2007 with the goal of discovering and developing therapies to improve the lives of women with cancer. Our management team has significant experience in oncology and in progressing products from early stage research to clinical trials, and ultimately to regulatory approval and commercialization. Together, they bring in-house expertise in medicinal chemistry, biology, translational medicine, computational biology and chemistry, in vitro and in vivo pharmacology, biomarker development and manufacturing. We have also established internal expertise in clinical development, clinical operations, pharmacovigilance, clinical pharmacology, regulatory and quality. Our Chief Executive Officer, Sean Bohlen, M.D., Ph.D., was previously the Executive Vice President, Global Medicines Development and Chief Medical Officer at AstraZeneca. Prior to AstraZeneca, Dr. Bohlen held various leadership roles during his 13 years at Genentech including Senior Vice President, Early Development. Other members of the management team have held senior level positions at Neomorphic (sold to Affymetrix), Serra Pharmaceuticals (sold to Karo Bio), Genentech, BlueRock Therapeutics (sold to Bayer AG), Intellikine (sold to Takeda), Kosan Biosciences (sold to Bristol-Myers Squibb), PTC Therapeutics, Portola Pharmaceuticals (sold to Alexion), Alexion Pharmaceuticals and Elan Corporation (sold to Perrigo). We are supported by our board of directors, scientific advisory board and a leading syndicate of investors which includes BVF Partners, Cormorant Asset Management, Foresite Capital, Janus Henderson Investors, Logos Capital, RA Capital Management, Surveyor Capital (a Citadel company), Venrock Healthcare Capital Partners and Wellington Management.

Our strategy

Our goal is to discover, develop and commercialize next generation targeted therapies for women's cancers. The key elements of our business strategy to achieve this goal include:

- Applying our deep understanding of nuclear receptors—particularly the ER—and mechanisms of resistance to develop novel therapeutic approaches for endocrine-driven cancers;
- Rapidly advancing our lead product candidate, OP-1250, through clinical development as a monotherapy for ER+/HER2- breast cancer;
- Establishing OP-1250 as the endocrine therapy of choice with targeted therapy combinations for the treatment of metastatic ER+ breast cancers;
- Exploring additional clinical opportunities for OP-1250, including metastatic breast cancer with brain metastases and other hormone sensitive tumors;
- Continuing to evaluate opportunities to accelerate development timelines and enhance the commercial potential of our programs in collaboration with third parties; and
- Expanding our portfolio of therapies focused on women's oncology through both internal research activities and business development efforts.

Risks related to our business

Investing in our common stock involves substantial risk. The risks described under the section titled "Risk Factors" immediately following this prospectus summary may cause us to not realize the full benefits of our strengths or may cause us to be unable to successfully execute all or part of our strategy. Some of the more significant challenges include the following:

- We have not completed any clinical trials and have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.
- Even if this offering is successful, we will require substantial additional capital to finance our operations. If we are unable to raise such capital when needed, or on acceptable terms, we may be forced to delay, reduce and/or eliminate one or more of our research and drug development programs of our only product or future commercialization efforts.
- We have incurred net losses since inception, and we expect to continue to incur net losses for the foreseeable future. We expect to continue to incur increased expenses and operating losses for the foreseeable future as we continue our research and development efforts and seek to obtain regulatory approval for OP-1250. In addition, we may be unable to continue as a going concern over the long-term.
- We are substantially dependent on the success of our only product candidate, OP-1250, which is currently in the early stages of clinical development. We cannot assure you that our planned clinical development programs for OP-1250 will be completed in a timely manner, or at all, or that we will be able to obtain approval for OP-1250 from the FDA, or any comparable foreign regulatory authority. If we are unable to complete development of, obtain regulatory approval for and commercialize OP-1250 in one or more indications and in a timely manner, our business, financial condition, results of operations and prospects will be significantly harmed.
- Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Failure can occur at any stage of clinical development. We have never completed a pivotal clinical trial or submitted a New Drug Application, or NDA, to the FDA or similar drug approval filings to comparable foreign authorities. If we are ultimately unable to obtain regulatory approval for OP-1250, we will be unable to generate product revenue and our business, financial condition, results of operations and prospects will be significantly harmed.
- Even if approved, OP-1250 may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success. The degree of

market acceptance would depend on a number of factors. If OP-1250 is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we may not generate or derive sufficient revenue and could significantly harm our business, financial condition, results of operations and prospects.

- We face significant competition, and if our competitors develop and market technologies or products more rapidly than we do or that are more effective, safer or less expensive than OP-1250, or product candidates we may develop in the future, our commercial opportunities will be negatively impacted.
- We may be unable to obtain U.S. or foreign regulatory approvals and, as a result, may be unable to commercialize OP-1250 or any future product candidate we may develop.
- The outbreak of the novel coronavirus disease, COVID-19, could adversely impact our business, including our nonclinical studies and clinical trials.
- In order to successfully implement our plans and strategies, we will need to grow the size of our organization, and we may experience difficulties in managing this growth. Given the small size of our organization, we may encounter difficulties managing multiple clinical trials at the same time, which could negatively affect our ability to manage the growth of our organization, particularly as we take on additional responsibility associated with being a public company. If we are not able to effectively expand our organization by hiring new employees and/or engaging additional third party service providers, we may not be able to successfully implement the tasks necessary to further develop and commercialize OP-1250 and any other future product candidates we may develop and, accordingly, may not achieve our research, development and commercialization goals.
- Our success depends on our ability to protect our intellectual property and our proprietary technologies. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. Thus, the degree of future protection for our proprietary rights is uncertain.
- We rely, and expect to continue to rely, on third parties, including independent clinical investigators and contract research organizations, or CROs, to conduct certain aspects of our nonclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize OP-1250 or future product candidates we may develop and our business, financial condition, results of operations and prospects could be significantly harmed.
- We have identified material weaknesses in our internal control over financial reporting. If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.

Corporate information

We were initially incorporated in Delaware in August 2006 under the name CombiThera, Inc., and we commenced operations in March 2007. In March 2009, we changed our name to Olema Pharmaceuticals, Inc. Our principal executive offices are located at 512 2nd Street, 4th Floor, San Francisco, California 94107, and our telephone number is (415) 651-3316. Our website address is www.olema.com. Information contained in, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only an inactive textual reference.

We use the Olema Oncology logo and other marks as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable

licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

Implications of being an emerging growth company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We may take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm under Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments. We may take advantage of these exemptions for up to five years or until we are no longer an "emerging growth company," whichever is earlier. We will cease to be an emerging growth company prior to the end of such five-year period if certain earlier events occur, including if we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, our annual gross revenues exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, 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 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 avail ourselves of this exemption 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."

The Offering

Common stock offered by us

shares.

Option to purchase additional shares

We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of our common stock at the initial public offering price, less underwriting discounts and commissions.

Common stock to be outstanding immediately after this offering

shares (or shares if the underwriters exercise their option to purchase additional shares in full).

Use of proceeds

We estimate that the net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters' option to purchase additional shares of our common stock from us is exercised in full), after deducting 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 and cash equivalents, to fund the clinical development of OP-1250 and other ongoing research and development activities, and for working capital and other general corporate purposes. See the section titled "Use of Proceeds" for additional information.

Risk factors

See the section titled "Risk Factors" beginning on page [11](#) and other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.

Proposed Nasdaq trading symbol

"OLMA"

The number of shares of our common stock to be outstanding after this offering is based on 76,725,191 shares of common stock outstanding as of September 30, 2020 (including (i) 66,257,144 shares issuable upon the conversion of all outstanding shares of our convertible preferred stock as of September 30, 2020 and (ii) 2,496,352 shares of unvested restricted common stock subject to repurchase as of such date), and excludes:

- 6,986,227 shares of our common stock issuable upon the exercise of outstanding stock options as of September 30, 2020, with a weighted-average exercise price of \$1.49 per share;
- shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to September 30, 2020, with a weighted-average exercise price of \$ per share;
- shares of our common stock reserved for future issuance under our 2020 Equity Incentive Plan, or 2020 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2020 Plan and any shares underlying outstanding stock awards granted under our 2014 Stock Plan, or 2014 Plan, that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled "Executive Compensation — Equity Benefit Plans"; and
- shares of our common stock reserved for issuance under our 2020 Employee Stock Purchase Plan, or ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, and any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

Unless otherwise indicated, this prospectus assumes or gives effect to:

- a -for- reverse stock split of our common stock to be effected prior to the closing of this offering;
- the automatic conversion of all outstanding shares of our convertible preferred stock as of September 30, 2020 into an aggregate of 66,257,144 shares of our common stock upon the closing of this offering;
- no exercise of the outstanding options described above;
- no exercise by the underwriters of their option to purchase additional shares of common stock from us in this offering;
- an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus; and
- the filing and effectiveness of our amended and restated certificate of incorporation immediately after the closing of this offering, and the adoption of our amended and restated bylaws upon the closing of this offering.

Summary financial data

The following tables set forth our summary financial data for the periods and as of the dates indicated. The following summary statements of operations data for the years ended December 31, 2018 and 2019 have been derived from our audited financial statements included elsewhere in this prospectus. The following summary statements of operations data for the nine months ended September 30, 2019 and 2020 and the summary balance sheet data as of September 30, 2020 have been derived from our unaudited interim condensed financial statements included elsewhere in this prospectus. The unaudited interim condensed financial statements were prepared on a basis consistent with our audited financial statements and include, in management's opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of the financial information set forth in those statements. Our historical results are not necessarily indicative of the results that may be expected for any period in the future and our interim results are not necessarily indicative of our expected results for the year ending December 31, 2020. 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 included elsewhere in this prospectus. The summary financial data included in this section are not intended to replace the financial statements and are qualified in their entirety by our financial statements and the related notes included elsewhere in this prospectus.

| | Year ended | | Nine months ended | |
|--|--|------------|-------------------|-------------|
| | December 31, | | September 30, | |
| | 2018 | 2019 | 2019 | 2020 |
| | (in thousands, except share and per share data) (unaudited) | | | |
| Operating expenses: | | | | |
| Research and development | \$ 1,693 | \$ 3,920 | \$ 3,010 | \$ 7,415 |
| General and administrative | 386 | 403 | 296 | 3,982 |
| Total operating expenses | 2,079 | 4,323 | 3,306 | 11,397 |
| Loss from operations | (2,079) | (4,323) | (3,306) | (11,397) |
| Other (expense) income: | | | | |
| Interest income | 4 | 7 | 7 | 59 |
| Interest (expense) | (28) | — | — | (653) |
| Other income | — | — | — | 1 |
| Loss on extinguishment of convertible notes | (63) | — | — | — |
| Loss on remeasurement of convertible notes | (31) | — | — | — |
| Total other (expense) income, net | (118) | 7 | 7 | (593) |
| Net loss and comprehensive loss ⁽¹⁾ | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (11,990) |
| Repurchase and retirement of Series A and Series A-1 convertible preferred stock | — | — | — | (1,869) |
| Net loss attributable to common stockholders | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (13,859) |
| Net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾ | \$ (0.31) | \$ (0.60) | \$ (0.46) | \$ (1.90) |
| Weighted-average shares used to compute net loss per share attributable to common stockholders, basic and diluted⁽¹⁾ | | | | |
| | 7,032,974 | 7,230,200 | 7,230,200 | 7,297,745 |
| Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)⁽¹⁾ | | | | |
| | \$ (0.21) | | \$ (0.35) | |
| Weighted-average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)⁽¹⁾ | | | | |
| | 20,133,714 | | 39,306,921 | |

- (1) See Note 11 to our financial statements included elsewhere in this prospectus for a description of how we compute basic and diluted net loss per share attributable to common stockholders and pro forma basic and diluted net loss per share attributable to common stockholders.

| (in thousands) | As of September 30, 2020 | | |
|--------------------------------------|--------------------------|--------------------------|---|
| | Actual | Pro forma ⁽¹⁾ | Pro forma as adjusted ⁽²⁾⁽³⁾ |
| | (unaudited) | | |
| Balance Sheet Data: | | | |
| Cash and cash equivalents | \$127,824 | \$ 127,824 | \$ |
| Working capital ⁽⁴⁾ | 123,814 | 123,814 | |
| Total assets | 130,683 | 130,683 | |
| Total liabilities | 5,273 | 5,273 | |
| Convertible preferred stock | 148,373 | - | |
| Accumulated deficit | (22,964) | (22,964) | |
| Total stockholders' equity (deficit) | (22,963) | 125,410 | |

- (1) The pro forma column in the balance sheet data gives effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 66,257,144 shares of common stock which will occur upon the closing of this offering and the related reclassification of the carrying value of our convertible preferred stock to permanent equity upon the closing of this offering, and (ii) the filing and effectiveness of our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering.
- (2) The pro forma as adjusted column in the balance sheet data gives effect to (i) the items described in footnote (1) above and (ii) the issuance and sale of shares of our common stock in this offering at the assumed initial public offering price of \$ per share after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) The pro forma as adjusted information is illustrative only and will depend 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 \$ per share would increase or decrease, as applicable, each of cash and cash equivalents, working capital, total assets and total stockholders' equity by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease, as applicable, each of cash and cash equivalents, working capital, total assets, and total stockholders' equity by \$ million, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (4) We define working capital as current assets less current liabilities. See our financial statements and 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 described below, as well as the other information in this prospectus, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" before deciding whether to invest in our common stock. Such risks and uncertainties may be amplified by the COVID-19 pandemic and its potential impact on our business and the global economy. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. This prospectus also contains forward-looking statements that involve risks. See the section titled "Special Note Regarding Forward-Looking Statements." Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors, including those set forth below. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.

Risks related to our financial position and need for additional capital

We have not completed any clinical trials and have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.

We are a clinical-stage biopharmaceutical company and we have no products approved for commercial sale, have not generated any revenue from product sales and have incurred losses since inception. To date, we have devoted substantially all of our resources and efforts to organizing and staffing our company, business planning, executing partnerships, raising capital, discovering, identifying and developing our product candidate, OP-1250, securing related intellectual property rights and conducting nonclinical studies and initiating a Phase 1/2 clinical trial of OP-1250. We have not yet demonstrated our ability to successfully complete any clinical trials, obtain marketing approvals, manufacture a commercial-scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. As a result, it may be more difficult for you to accurately predict our future success or viability than it could be if we had a longer operating history.

In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors and risks frequently experienced by clinical-stage biopharmaceutical companies in rapidly evolving fields. We also may need to transition from a company with a research focus to a company capable of successfully executing drug development activities and supporting commercial operations. If we do not adequately address these risks and difficulties or successfully make such a transition, our business, financial condition, results of operations and prospects will be significantly harmed.

Even if this offering is successful, we will require substantial additional capital to finance our operations. If we are unable to raise such capital when needed, or on acceptable terms, we may be forced to delay, reduce and/or eliminate one or more of our research and drug development programs of our only product or future commercialization efforts.

Developing pharmaceutical products, including conducting nonclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. Our operations have consumed substantial amounts of cash since inception, and we expect our expenses will increase in connection with our ongoing activities, particularly as we initiate and conduct clinical trials of, and seek marketing approval for, OP-1250. With only one product candidate in development, we anticipate incurring significant costs associated with the development of OP-1250. Our expenses could increase beyond expectations if we are required by the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or the EMA, or other regulatory agencies to perform clinical trials or nonclinical studies in addition to those that we currently anticipate. Other unanticipated costs may also arise. In addition, if we obtain marketing approval for OP-1250, we expect to incur significant commercialization expenses related to drug sales, marketing, manufacturing and distribution. Because the design and outcome of our planned and anticipated clinical trials are highly uncertain, we cannot reasonably

estimate the actual amounts necessary to successfully complete the development and commercialization of any product candidate we develop. Following this offering, we also expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in order to maintain our continuing operations.

As of September 30, 2020, we had \$127.8 million in cash and cash equivalents. Based on our current operating plans, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our operating expenses and capital expenditures requirements for at least the next 24 months. Our estimate as to how long we expect the net proceeds from this offering, together with our existing cash and cash equivalents, to be able to continue to fund our operating expenses and capital expenditures requirements is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned. Moreover, it is particularly difficult to estimate with certainty our future expenses given the dynamic nature of our business, the COVID-19 pandemic and the macro-economic environment generally.

We plan to use the net proceeds from this offering to advance and expand our clinical and nonclinical development programs and for working capital and other general corporate purposes. Advancing the development of OP-1250 and any future product candidates we may develop will require a significant amount of capital. The net proceeds from this offering and our existing cash and cash equivalents will not be sufficient to fund all of the activities that are necessary to complete the development of OP-1250.

We will be required to obtain further funding through public or private equity offerings, debt financings, collaborations and licensing arrangements or other sources, which may dilute our stockholders or restrict our operating activities. Adequate additional financing may not be available to us on acceptable terms, or at all. Market volatility, including as a result of the COVID-19 pandemic, could also adversely impact our ability to access capital as and when needed. Our failure to raise capital as and when needed or on acceptable terms would have a negative impact on our financial condition and our ability to pursue our business strategy, and we may have to delay, reduce the scope of, suspend or eliminate one or more of our research-stage programs, clinical trials or future commercialization efforts.

We have incurred net losses since inception, and we expect to continue to incur net losses for the foreseeable future. In addition, we may be unable to continue as a going concern over the long-term.

We have incurred net losses in each reporting period since our inception, have not generated any revenue from product sales to date and have financed our operations principally through private financings. We have incurred net losses of \$4.3 million and \$2.2 million for the years ended December 31, 2019 and 2018, respectively and \$12.0 million for the nine months ended September 30, 2020. We had an accumulated deficit of \$10.8 million and \$23.0 million as of December 31, 2019 and September 30, 2020, respectively. Our losses have resulted principally from expenses incurred in research and development of OP-1250 and from management and administrative costs and other expenses that we have incurred while building our business infrastructure. Our only product candidate, OP-1250, is in early-stage clinical trials. As a result, we expect that it will be several years, if ever, before we have a commercialized product and generate revenue from product sales. Even if we succeed in receiving marketing approval for and commercializing OP-1250 in one of our lead indications, we expect that we will continue to incur substantial research and development and other expenses as we continue the clinical development programs for OP-1250 in other indications.

We expect to continue to incur increased expenses and operating losses for the foreseeable future as we continue our research and development efforts and seek to obtain regulatory approval for OP-1250. The net losses we incur may fluctuate significantly from quarter to quarter such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had, and will continue to have, an adverse effect on our working capital. In

any particular period, our operating results could be below the expectations of securities analysts or investors, which could cause our stock price to decline.

In addition, our financial statements for the year ended December 31, 2019 included elsewhere in this prospectus have been prepared assuming we will continue as a going concern. However, we have incurred losses and negative cash flows from operations. As a development stage company, we expect to incur significant and increasing losses until regulatory approval is granted for OP-1250. Regulatory approval is not guaranteed and may never be obtained. As a result, these conditions raise substantial doubt about our ability to continue as a going concern over the long-term.

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 our collaboration partners, to successfully complete the development of, and obtain the regulatory approvals necessary to commercialize, OP-1250 and any future product candidates we may develop. We do not anticipate generating revenue from product sales for the next several years, if ever. Our ability to generate revenue from product sales depends heavily on our and our current and potential future collaborators' success in:

- completing clinical and nonclinical development of product candidates and programs and identifying and developing new product candidates;
- seeking and obtaining marketing approvals for any product candidates that we develop;
- launching and commercializing product candidates for which we obtain marketing approval by establishing a sales force, marketing, medical affairs and distribution infrastructure or, alternatively, collaborating with a commercialization partner;
- achieving adequate access and reimbursement by government and third-party payors for product candidates that we develop;
- establishing and maintaining 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 product candidates that we develop, if approved;
- obtaining market acceptance of product candidates that we develop as viable treatment options;
- addressing any competing technological and market developments;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations in such collaborations;
- maintaining, protecting, enforcing and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- defending against third-party interference, infringement or other intellectual property-related claims, if any; and
- attracting, hiring and retaining qualified personnel.

Even if OP-1250 or any future product candidate that we may develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Our expenses could increase beyond expectations if we are required by the FDA, the EMA or other comparable regulatory agencies to perform clinical trials or nonclinical studies in addition to those that we currently anticipate. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

Risks related to the discovery, development and commercialization of our product candidate

We are substantially dependent on the success of our only product candidate, OP-1250, which is currently in the early stages of clinical development. If we are unable to complete development of, obtain regulatory approval for and commercialize OP-1250 in one or more indications and in a timely manner, our business, financial condition, results of operations and prospects will be significantly harmed.

Our future success is heavily dependent on our ability to timely complete clinical trials, obtain marketing approval for and successfully commercialize OP-1250, our only product candidate. We expect that a substantial portion of our efforts and expenses over the next several years will be devoted to the development of OP-1250 in our ongoing clinical trials in multiple indications. We are investing significant efforts and financial resources in the research and development of OP-1250. OP-1250 will require additional clinical development, evaluation of clinical, nonclinical and manufacturing activities, marketing approval from government regulators, and significant marketing efforts before we can generate any revenues from product sales. We are not permitted to market or promote OP-1250 before we receive marketing approval from the FDA and comparable foreign regulatory authorities, and we may never receive such marketing approvals. Should our planned clinical development of OP-1250 in our lead indications fail to be completed in a timely manner or at all, we will need to rely on our ongoing and planned clinical development of OP-1250 in additional indications, which will require more time and resources to obtain regulatory approval and proceed with commercialization, and may ultimately be unsuccessful. We cannot assure you that our planned clinical development programs for OP-1250 will be completed in a timely manner, or at all, or that we will be able to obtain approval for OP-1250 from the FDA, EMA, or any comparable foreign regulatory authority. If we are unable to complete development of, obtain regulatory approval for and commercialize OP-1250 in one or more indications and in a timely manner, our business, financial condition, results of operations and prospects will be significantly harmed.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Failure can occur at any stage of clinical development. We have never completed a clinical trial or submitted a New Drug Application, or NDA, to the FDA or similar drug approval filings to comparable foreign authorities. If we are ultimately unable to obtain regulatory approval for OP-1250, we will be unable to generate product revenue and our business, financial condition, results of operations and prospects will be significantly harmed.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of nonclinical studies and early clinical trials of OP-1250 and any future product candidates we may develop may not be predictive of the results of subsequent clinical trials. We have a limited operating history and to date have not demonstrated our ability to complete large scale clinical trials.

Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through nonclinical studies and initial clinical trials. In addition to the safety and efficacy traits of any product candidate, clinical trial failures may result from a multitude of factors including flaws in trial design, dose selection, placebo effect and patient enrollment criteria. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we or any potential future collaborator may decide, or regulators may require us, to conduct additional clinical trials or nonclinical studies. In addition, data obtained from trials and studies are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval.

Our future clinical trials may not be successful. If any product candidate is found to be unsafe or lack efficacy, we will not be able to obtain regulatory approval for it and our business, financial condition, results of operations and prospects may be significantly harmed. In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same product candidate due to numerous factors, including

changes in trial protocols, differences in composition of the patient populations, adherence to the dosing regimen and other trial protocols and the dropout rate among clinical trial participants. Patients treated with OP-1250 or product candidates we may develop in the future may also be undergoing surgical, radiation and chemotherapy treatments and may be using other approved products or investigational new drugs, which can cause side effects or adverse events that are unrelated to OP-1250 or product candidates we may develop. As a result, assessments of efficacy can vary widely for a particular patient, and from patient to patient and site to site within a clinical trial. This subjectivity can increase the uncertainty of, and adversely impact, our clinical trial outcomes. We do not know whether any clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain marketing approval to market OP-1250 or any future product candidates we may develop.

We do not know whether our current clinical trial of OP-1250 or any future clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market OP-1250 or any future product candidates we may develop. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization. If we are unable to bring OP-1250 or any future product candidates to market, our ability to create long-term shareholder value will be limited.

In addition, we may rely in part on nonclinical, clinical and quality data generated by contract research organizations, or CROs, and other third parties for regulatory submissions for OP-1250. While we have or will have agreements governing these third parties' services, we have limited influence over their actual performance. If these third parties do not make data available to us, or, if applicable, make regulatory submissions in a timely manner, our development programs may be significantly delayed, and we may need to conduct additional studies or collect additional data independently. In either case, our development costs would increase.

Moreover, nonclinical and clinical data are often susceptible to varying interpretations and analyses and many companies that believed their product candidates performed satisfactorily in nonclinical studies and clinical trials nonetheless failed to obtain FDA, EMA or comparable foreign regulatory authority approval. We cannot guarantee that the FDA or foreign regulatory authorities will interpret trial results as we do, and more trials could be required before we are able to submit an application seeking approval of OP-1250 or any future product candidates we may develop. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of OP-1250 or any future product candidates we may develop. Even if regulatory approval is secured for OP-1250, the terms of such approval may limit the scope and use of OP-1250, which may also limit its commercial potential. Furthermore, the approval policies or regulations of the FDA, EMA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval, which may lead to the FDA, EMA or comparable foreign regulatory authorities delaying, limiting or denying approval of OP-1250, including and any other indication we are seeking for approval under OP-1250.

The regulatory approval processes of the FDA, EMA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for OP-1250 or any future product candidates we may develop, our business, financial condition, results of operations and prospects will be significantly harmed.

The time required to obtain approval by the FDA, EMA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions.

Applications for OP-1250 could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;

- the FDA, EMA or other comparable foreign regulatory authorities may determine that OP-1250 is not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- the FDA, EMA or other comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;
- the data collected from clinical trials of OP-1250 may not be sufficient to support the submission of a NDA, or other submission or to obtain regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA, EMA or other comparable foreign regulatory authorities that OP-1250's risk-benefit ratio for its proposed indication is acceptable;
- the FDA, EMA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, EMA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market OP-1250, which would significantly harm our business, financial condition, results of operations and prospects.

In addition, even if we obtain approval of OP-1250 for a lead indication, regulatory authorities may not approve OP-1250 for other indications, may impose significant limitations in the form of narrow indications, warnings, or a Risk Evaluation and Mitigation Strategy, or REMS. Certain regulatory authorities may grant approval contingent on the performance of costly post-marketing clinical trials or may approve OP-1250 with a label that does not include the labeling claims necessary or desirable for successful. In addition, regulatory authorities in certain countries may not approve the price we intend to charge for the product we develop. If we are unable to obtain regulatory approval of OP-1250, or if regulatory approval is limited, our business, financial condition, results of operation and prospects will be significantly harmed.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

We may experience delays in clinical trials of OP-1250 or any future product candidate we may develop. Our planned clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients, or be completed on schedule, if at all. Our clinical trials can be delayed for a variety of reasons, including delays related to:

- the FDA, EMA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials;
- obtaining regulatory authorizations to commence a trial or reaching a consensus with regulatory authorities on trial design;
- any failure or delay in reaching an agreement with CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining approval from one or more institutional review boards, or IRBs;
- IRBs refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional subjects, or withdrawing their approval of the trial;
- changes to clinical trial protocol;

- clinical sites deviating from trial protocol or dropping out of a trial;
- manufacturing sufficient quantities of product candidate or obtaining sufficient quantities of combination therapies for use in clinical trials;
- subjects failing to enroll or remain in our trial at the rate we expect, or failing to return for post-treatment follow-up;
- delays in enrollment by subjects, or completion of the trial by subjects, due to the COVID-19 pandemic;
- subjects choosing an alternative treatment for the indication for which we are developing OP-1250, or participating in competing clinical trials;
- lack of adequate funding to continue the clinical trial;
- subjects experiencing severe or unexpected drug-related adverse effects;
- regulatory authorities imposing a clinical hold;
- occurrence of serious adverse events in trials of the same class of agents conducted by other companies;
- selection of clinical end points that require prolonged periods of clinical observation or analysis of the resulting data;
- shutdowns, either temporarily or permanently, of any facility manufacturing OP-1250 or any future product candidate we may develop or any of their components, including by order from the FDA, EMA or comparable foreign regulatory authorities due to violations of current good manufacturing practice, or cGMP, regulations or other applicable requirements, or infections or cross-contaminations of OP-1250 or any future product candidate we may develop in the manufacturing process;
- any changes to our manufacturing process that may be necessary or desired;
- 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, good clinical practices, or GCP, or other regulatory requirements;
- third-party contractors not performing data collection or analysis in a timely or accurate manner; or
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other government or regulatory authorities for violations of regulatory requirements, in which case we may need to find a substitute contractor, and we may not be able to use some or all of the data produced by such contractors in support of our marketing applications.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing clinical trials. We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by a Data Safety Monitoring Board for such trial or by the FDA, EMA or comparable foreign regulatory authorities. Such 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 comparable foreign regulatory 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, 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 OP-1250 or product candidates we may develop in the future, 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 protocol as a result of differences in

healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries.

If we experience delays in the completion of, or termination of, any clinical trial of OP-1250 or any product candidates we may develop in the future, the commercial prospects of OP-1250 or any product candidates we may develop in the future will be harmed, and our ability to generate product revenues from OP-1250 or any product candidates we may develop in the future will be delayed. Moreover, any delays in completing our clinical trials will increase our costs, slow down OP-1250's or any product candidates we may develop in the future's development and approval process and jeopardize our ability to commence product sales and generate revenues.

In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical trials may also ultimately lead to the denial of regulatory approval of OP-1250 or any product candidates we may develop in the future. Any delays in our clinical trials that occur as a result could shorten any period during which we may have the exclusive right to commercialize OP-1250 or any product candidates we may develop in the future and our competitors may be able to bring products to market before we do, and the commercial viability of OP-1250 or any product candidates we may develop in the future could be significantly reduced. Any of these occurrences may significantly harm our business, financial condition, results of operations and prospects.

Because we are pursuing a variety of target indications for OP-1250, we may expend our limited resources to pursue a particular indication and fail to capitalize on indications or additional product candidates that may be more profitable or for which there is a greater likelihood of success.

We are currently focused on pursuing a variety of target indications for OP-1250, and we have expended, and plan to continue to expend, significant resources to pursue these and other indications for OP-1250. In addition, we may in the future spend our resources on other research programs and product candidates for specific indications that ultimately do 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.

Because we have limited financial and managerial resources, we must focus our research and development efforts on those product candidates and specific indications that we believe are the most promising. As a result, we may forego or delay pursuit of opportunities with other product candidates or other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities, which will significantly harm our business, financial condition, results of operations and prospects.

Even if approved, OP-1250 may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

Even if OP-1250 receives regulatory approval, it may not gain adequate market acceptance among physicians, patients, healthcare payors and others in the medical community. The degree of market acceptance would depend on a number of factors, including:

- the efficacy and safety profile as demonstrated in clinical trials compared to alternative treatments;
- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which the product candidate is approved;
- restrictions on the use of OP-1250, such as boxed warnings or contraindications in labeling, or a REMS, if any, which may not be required of alternative treatments and competitor products;
- the potential and perceived advantages of product candidates over alternative treatments;
- the cost of treatment in relation to alternative treatments;

- our pricing and the availability of coverage and adequate reimbursement by third-party payors, including government authorities;
- the availability of OP-1250 for use as a combination therapy;
- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the effectiveness of sales and marketing efforts;
- unfavorable publicity relating to OP-1250 or similar approved products or product candidates in development by third parties; and
- the approval of other new therapies for the same indications.

If OP-1250 is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we may not generate or derive sufficient revenue and could significantly harm our business, financial condition, results of operations and prospects.

If we experience delays or difficulties in the enrollment and/or maintenance of patients in clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

Patient enrollment is a significant factor in the timing of clinical trials, and the timing of our clinical trials depends, in part, on the speed at which we can recruit patients to participate in our trials, as well as completion of required follow-up periods. We may not be able to initiate or continue clinical trials for OP-1250, or any future product candidate we may develop, if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials to such trial's conclusion as required by the FDA, EMA or other comparable foreign regulatory authorities. Additionally, certain clinical trials for future product candidates may be focused on indications with relatively small patient populations, which may further limit enrollment of eligible patients or may result in slower enrollment than we anticipate. The eligibility criteria of our clinical trials, once established, may further limit the pool of available trial participants.

Enrollment of patients in our clinical trials and maintaining patients in our ongoing clinical trials may be delayed or limited as our clinical trial sites limit their onsite staff or temporarily close as a result of the COVID-19 pandemic. In addition, patients may not be able to visit clinical trial sites for dosing or data collection purposes due to limitations on travel and physical distancing imposed or recommended by federal or state governments or patients' reluctance to visit the clinical trial sites during the pandemic. These factors resulting from the COVID-19 pandemic could delay the anticipated readouts from our clinical trials and ultimately delay future regulatory submissions.

Patient enrollment may also be affected if our competitors have ongoing clinical trials for product candidates that are under development for the same indications as OP-1250, or any future product candidate we may develop, and patients who would otherwise be eligible for our clinical trials instead enroll in clinical trials of our competitors' product candidates. Patient enrollment for any of our clinical trials may be affected by other factors, including:

- size and nature of the patient population;
- severity of the disease under investigation;
- availability and efficacy of approved drugs for the disease under investigation;
- patient eligibility criteria for the trial in question as defined in the protocol;
- perceived risks and benefits of the product candidate under study;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new products that may be approved for the indications we are investigating;

- efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;
- proximity and availability of clinical trial sites for prospective patients;
- continued enrollment of prospective patients by clinical trial sites; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion or, because they may be late-stage cancer patients, will not survive the full terms of the clinical trials.

Our inability to enroll and maintain a sufficient number of patients for our clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for OP-1250 or any future product candidate we may develop and jeopardize our ability to obtain marketing approval for the sale of OP-1250 or any product candidate we may develop in the future. Furthermore, even if we are able to enroll a sufficient number of patients for our clinical trials, we may have difficulty maintaining enrollment of such patients in our clinical trials.

We intend to develop OP-1250, and may develop future product candidates, in combination with other therapies, which exposes us to additional risks.

We intend to develop OP-1250, and may develop other future product candidates, in combination with one or more other approved or unapproved therapies to treat cancer or other diseases. For example, we plan to initiate a Phase 1b clinical trial of OP-1250 as part of combination therapy with independent arms investigating its potential with a cyclin-dependent kinase 4 and 6 inhibitor and with a phosphatidylinositol 3-kinase alpha inhibitor.

Even if OP-1250, or any future product candidate we develop, 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 comparable foreign regulatory authorities could revoke approval of the therapy used in combination with our product or that safety, efficacy, manufacturing or supply issues could arise with any of those existing therapies. If the therapies we use in combination with OP-1250, or any future product candidate we may develop, are replaced as the standard of care for the indications we choose for OP-1250 or any future product candidate we may develop, the FDA, EMA or comparable foreign regulatory authorities may require us to conduct additional clinical trials. The occurrence of any of these risks could result in our own product, if approved, being removed from the market or being less successful commercially.

We also may choose to evaluate OP-1250 or future product candidates in combination with one or more cancer therapies that have not yet been approved for marketing by the FDA, EMA or comparable foreign regulatory authorities. We will not be able to market and sell OP-1250, or any future product candidate we may develop, in combination with an unapproved cancer therapy for a combination indication if that unapproved therapy does not ultimately obtain marketing approval either alone or in combination with our product. In addition, unapproved cancer therapies face the same risks described with respect to OP-1250 currently in development and clinical trials, including the potential for serious adverse effects, delay in their clinical trials and lack of FDA, EMA or comparable foreign regulatory approval.

If the FDA, EMA or comparable foreign regulatory authorities do not approve these other drugs or revoke their approval of, or if safety, efficacy, quality, manufacturing or supply issues arise with, the drugs we choose to evaluate in combination with OP-1250 or future product candidates we may develop, we may be unable to obtain approval of or market such combination therapy.

The incidence and prevalence for target patient populations of OP-1250 are based on estimates and third-party sources. If the market opportunities for OP-1250, or any future product candidate we may develop, if and when approved, are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability might be materially and adversely affected.

Periodically, we make estimates regarding the incidence and prevalence of target patient populations for particular diseases based on various third-party sources and internally generated analysis and use such estimates

in making decisions regarding our drug development strategy, including acquiring or in-licensing product candidates and determining indications on which to focus in nonclinical or clinical trials.

The incidence and prevalence for target patient populations of OP-1250 are based on estimates and third-party sources. These estimates may be inaccurate or based on imprecise data. For example, the total addressable market opportunity will depend on, among other things, acceptance of our drugs by the medical community and patient access, drug pricing and reimbursement. The number of patients in the addressable markets may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our drugs, or new patients may become increasingly difficult to identify or gain access to. If the market opportunities for OP-1250, or any future product candidate we may develop, if and when approved, are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability might be materially and adversely affected.

Interim, initial, “top-line” and preliminary 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 preliminary or top-line data from our nonclinical studies and clinical trials, which is 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 top-line 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. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line 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 or as patients from our clinical trials continue other treatments for their disease. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock after this offering.

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 our particular program, the approvability or commercialization of our 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 material or otherwise appropriate information to include in our disclosure.

If the interim, top-line, 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, OP-1250 or any future product candidates we may develop may be harmed, which could significantly harm our business, financial condition, results of operations and prospects.

We face significant competition, and if our competitors develop and market technologies or products more rapidly than we do or that are more effective, safer or less expensive than OP-1250, or product candidates we may develop in the future, our commercial opportunities will be negatively impacted.

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. Our competitors

have developed, are developing or may develop products, product candidates and processes competitive with OP-1250. Any product candidate that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we are attempting to develop OP-1250. Products we may develop in the future are also likely to face competition from other products and therapies, some of which we may not currently be aware. In addition, OP-1250 and any product candidate that we may develop in the future may need to compete with off-label drugs used by physicians to treat the indications for which we seek approval. This may make it difficult for us to replace existing therapies with OP-1250 and any product candidate that we may develop in the future.

In particular, there is intense competition in the fields of women's cancer which we are pursuing. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, emerging and start-up companies, universities and other research institutions. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We will also face competition in establishing clinical trial sites, enrolling subjects for clinical trials and in identifying and in-licensing new product candidates.

If we are successful in developing OP-1250, it may compete against existing products and product candidates in development, to the extent any such product candidates are approved, for the treatment of estrogen receptor-positive, or ER+, breast cancer, including certain complete estrogen receptor antagonist therapies, such as RG6171 being developed by Roche Holding AG/Genentech, Inc., or Genentech, fulvestrant, marketed as Faslodex® by AstraZeneca PLC, or any generic equivalents of Faslodex® that may be developed, AZD9833 being developed by AstraZeneca PLC, SAR439859 being developed by Sanofi S.A. and LY3484356 being developed by Eli Lilly and Co., as well as certain selective estrogen receptor degrader, or SERD, or SERD therapies that are not complete ER antagonists, or CERAN, such as ZN-c5 being developed by Zentalis Pharmaceuticals, Inc., elacestrant being developed by Radius Health, Inc., ARV-471 being developed by Arvinas, Inc., rintodestrant (G1T48) being developed by G1 Therapeutics, Inc. and H3B-6545 being developed by H3 Biomedicines, a subsidiary of Eisai Co., Ltd.

We have chosen to initially address well-validated biochemical targets, and therefore expect to face competition from existing products and products in development. There are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. Many of these current and potential competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources and commercial expertise than we do. Large pharmaceutical and biotechnology companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing biotechnology products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical and biotechnology companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidate that we develop obsolete. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies, as well as in acquiring technologies complementary to, or necessary for, our programs. As a result of all of these factors, our competitors may succeed in obtaining approval from the FDA, EMA or other comparable foreign regulatory authorities or in discovering, developing and commercializing products in our field before we do.

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 effects, are more convenient, have a broader label, are marketed more effectively, receive greater levels of reimbursement than products we may develop receive or are less expensive than any products that we may develop. Our competitors also may obtain marketing approval from the FDA, EMA or other comparable foreign regulatory authorities 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. Even if OP-1250 or other product candidates we may develop in the

future achieve marketing approval, they may be priced at a significant premium over competitive products if any have been approved by then, resulting in reduced competitiveness. Technological advances or products developed by our competitors may render our technologies or OP-1250 or product candidates we may develop in the future obsolete, less competitive or not economical. If we are unable to compete effectively, our opportunity to generate revenue from the sale of our product we may develop, if approved, would be adversely affected.

Changes in methods of OP-1250 manufacturing or formulation may result in additional costs or delay.

As OP-1250 progresses through nonclinical 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 OP-1250 to perform differently and affect the results of planned clinical trials or other 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 OP-1250 and jeopardize our ability to commercialize OP-1250, if approved, and generate revenue.

Any product candidate we develop may become subject to unfavorable third-party coverage and reimbursement practices, as well as pricing regulations.

The availability and extent of coverage and adequate reimbursement by third-party payors, including government health administration authorities, private health coverage insurers, managed care organizations and other third-party payors is essential for most patients to be able to afford expensive treatments. If we obtain marketing approval of OP-1250, or any future product candidate we may develop, sales of such product will depend substantially, both in the United States and internationally, on the extent to which the costs of the product will be covered and reimbursed by third-party payors. If reimbursement is not available, or is available only at inadequate levels, we may not be able to successfully commercialize OP-1250 or any future product candidates we may develop. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize an adequate return on our investment. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, for example, principal decisions about reimbursement for new products are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services. CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare, and private third-party payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, one third-party payor's determination to provide coverage for a product candidate does not assure that other payors will also provide coverage for the product candidate. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. As a result, the coverage determination process is often time-consuming and costly. This process will require us to provide scientific and clinical support for the use of our product to each third-party payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular products and requiring substitutions of generic products and/or biosimilars. 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. Further, such payors are increasingly examining the medical necessity and reviewing the cost effectiveness of medical product candidates. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific product candidates on an approved list, known as a formulary, which might not include all FDA-approved drugs for a particular indication. We may need to conduct expensive pharmacoeconomic studies to demonstrate the medical necessity and cost effectiveness of our product. Nonetheless, OP-1250 or any future product candidates we may develop may not be considered medically necessary or cost effective. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be.

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 therapeutics such as OP-1250 or any future product candidates we may develop. In many countries, particularly the countries of the European Union, medical product prices are subject to varying price control mechanisms as part of national health systems. In these countries, pricing negotiations with governmental authorities can take considerable time after a product receives marketing approval. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of OP-1250 or any future product candidates we may develop to other available therapies. In general, product prices under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for 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 OP-1250 or any future product candidates we may develop. Accordingly, in markets outside the United States, the reimbursement for any product that we commercialize may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

If we are unable to establish or sustain coverage and adequate reimbursement for any product candidates that we commercialize from third-party payors, the adoption of those products and potential sales revenue would be adversely affected, which, in turn, could adversely affect the ability to market or sell those product candidates, if approved. Coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for a product for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Guidelines and recommendations published by various organizations can reduce the use of OP-1250 or any future product candidates we may develop.

Government agencies promulgate regulations and guidelines directly applicable to us and to OP-1250 or any future product candidates we may develop. In addition, professional societies, such as practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the healthcare and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines suggesting the reduced use of OP-1250 or any future product candidates we may develop or the use of competitive or alternative products as the standard of care to be followed by patients and healthcare providers could result in decreased use of OP-1250 or any future product candidates we may develop.

Risks related to regulatory approval and other legal compliance matters

We may be unable to obtain U.S. or foreign regulatory approvals and, as a result, may be unable to commercialize OP-1250 or any future product candidate we may develop.

OP-1250 is, and any product candidate we develop in the future will be, subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, efficacy,

approval, recordkeeping, reporting, labeling, storage, packaging, advertising and promotion, pricing, marketing and distribution of drugs. Rigorous nonclinical testing and clinical trials and an extensive regulatory approval process must be successfully completed in the United States and in many foreign jurisdictions before a new drug can be marketed. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. We cannot provide any assurance that OP-1250 or any product candidate we may develop will progress through required clinical testing and obtain the regulatory approvals necessary for us to begin selling them.

We have not conducted, managed or completed large-scale or pivotal clinical trials nor managed the regulatory approval process with the FDA or any other regulatory authority. The time required to obtain approvals from the FDA and other regulatory authorities is unpredictable, and requires successful completion of extensive clinical trials which typically takes many years, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA, EMA or other comparable foreign regulatory authorities use when evaluating clinical trial data can, and often does, change during drug development, which makes it difficult to predict with any certainty how they will be applied. We may also encounter unexpected delays or increased costs due to new government regulations, including future legislation or administrative action, or changes in FDA EMA or other comparable foreign regulatory authorities' policies during the period of drug development, clinical trials and FDA, EMA or other comparable foreign regulatory authorities' regulatory review.

Any delay or failure in seeking or obtaining required approvals would have a material and adverse effect on our ability to generate revenue from the particular product candidate for which we are developing and seeking approval. Furthermore, any regulatory approval to market a drug may be subject to significant limitations on the approved uses or indications for which we may market the drug or the labeling or other restrictions. In addition, the FDA has the authority to require a REMS as part of approving a NDA, or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug. These requirements or restrictions might include limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. These limitations and restrictions may significantly limit the size of the market for the drug and affect reimbursement by third-party payors.

We may also become subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials and manufacturing of OP-1250. The foreign regulatory approval process varies among countries, and generally includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval.

Our business entails a significant risk of product liability and if we are unable to obtain sufficient insurance coverage, such inability could significantly harm our business, financial condition, results of operations and prospects.

Our business exposes us to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, such claims could result in an FDA, EMA or other regulatory authority investigation of the safety and effectiveness of our product, our manufacturing processes and facilities or our marketing programs. FDA, EMA or other regulatory authority investigations could potentially lead to a recall of our product or more serious enforcement action, limitations on the approved indications for which it may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our product, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources and substantial monetary awards to trial participants or patients. We currently have product liability insurance that we believe is appropriate for our stage of development and may need to obtain higher levels prior to marketing OP-1250, if approved. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain

sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could significantly harm our business, financial condition, results of operations and prospects.

OP-1250 and any future product candidates we develop may cause significant adverse events, toxicities or other undesirable side effects when used alone or in combination with other approved products or investigational new drugs that may result in a safety profile that could inhibit regulatory approval, prevent market acceptance, limit their commercial potential or result in significant negative consequences.

As is the case with pharmaceuticals generally, it is likely that there may be side effects and adverse events associated with the use of OP-1250 or any future product candidates we may develop. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects caused by OP-1250 or any future product candidates we may develop could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA or other comparable foreign regulatory authorities. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may significantly harm our business, financial condition, results of operations and prospects.

If OP-1250 or any future product candidates we may develop are associated with undesirable side effects or have unexpected characteristics in nonclinical studies or clinical trials when used alone or in combination with other approved products or investigational new drugs, we may need to interrupt, delay or abandon their development or limit 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. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete a trial, or result in potential product liability claims. Any of these occurrences may prevent us from achieving or maintaining market acceptance of the affected product candidate and may significantly harm our business, financial condition, results of operations and prospects.

Patients in our ongoing and planned clinical trials may in the future suffer significant adverse events or other side effects not observed in our nonclinical studies or previous clinical trials. OP-1250 or any future product candidates we may develop, may be used as chronic therapies or be used in pediatric populations, for which safety concerns may be particularly scrutinized by regulatory agencies. In addition, if OP-1250 or any future product candidates we may develop, are used in combination with other therapies, OP-1250 or any future product candidates we may develop may exacerbate adverse events associated with the therapy and it may not be possible to determine whether it was caused by our product or the one with which it was combined. Patients treated with OP-1250 or any future candidates we may develop, may also be undergoing surgical, radiation and chemotherapy treatments, which can cause side effects or adverse events that are unrelated to OP-1250 or any future product candidates we may develop, but may still impact the success of our clinical trials. The inclusion of critically ill patients in our clinical trials may result in deaths or other adverse medical events due to other therapies or medications that such patients may be using or due to the gravity of such patients' illnesses.

If significant adverse events or other side effects are observed in any of our current or future clinical trials, we may have difficulty recruiting patients to the clinical trials, patients may drop out of our trials, or we may be required to abandon the trials or our development efforts of that product candidate altogether. We, the FDA, EMA, other comparable regulatory authorities or an IRB may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance due to its tolerability versus other therapies. Any of these developments could significantly harm our business, financial condition, results of operations and prospects.

Further, if OP-1250 obtains marketing approval, toxicities associated with OP-1250 and not seen during clinical testing may also develop after such approval and lead to a requirement to conduct additional clinical safety trials,

additional contraindications, warnings and precautions being added to the drug label, significant restrictions on the use of the product or the withdrawal of the product from the market. We cannot predict whether OP-1250 will cause toxicities in humans that would preclude or lead to the revocation of regulatory approval based on nonclinical studies or early-stage clinical trials.

The FDA, EMA and other comparable foreign regulatory authorities may not accept data from trials conducted in locations outside of their jurisdiction.

We may choose to conduct international clinical trials in the future. The acceptance of study data by the FDA, EMA or other comparable foreign regulatory authority from clinical trials conducted outside of their respective jurisdictions may be subject to certain conditions. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (1) the data are applicable to the United States population and United States medical practice; (2) the trials are performed by clinical investigators of recognized competence and pursuant to current GCP requirements; and (3) the FDA is able to validate the data through an on-site inspection or other appropriate mean. Additionally, the FDA's clinical trial requirements, including the adequacy of the patient population studied and statistical powering, must be met. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, EMA or any applicable foreign regulatory authority will accept data from trials conducted outside of its applicable jurisdiction. If the FDA, EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in OP-1250 or any future product candidates we may develop not receiving approval for commercialization in the applicable jurisdiction.

Obtaining and maintaining regulatory approval of OP-1250, or any product candidate we develop in the future, in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of OP-1250, or any product candidate we develop in the future, in other jurisdictions.

Obtaining and maintaining regulatory approval of OP-1250, or any product candidate we develop in the future, in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction. For example, even if the FDA, EMA or other foreign regulatory authority grants marketing approval of a product candidate, comparable 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 regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional nonclinical 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 product is also subject to approval.

Obtaining foreign regulatory 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 product 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 OP-1250, or any product candidate we develop in the future, will be harmed.

Even if OP-1250, or any product candidate we develop in the future, receives regulatory approval, it will be subject to significant post-marketing regulatory requirements and oversight.

Any regulatory approvals that we may receive for OP-1250, or any product candidate we develop in the future, will require the submission of reports to regulatory authorities and surveillance to monitor the safety and efficacy of the product candidate, may contain significant limitations related to use restrictions for specified age groups,

warnings, precautions or contraindications, and may include burdensome post-approval study or risk management requirements. For example, the FDA may require a REMS in order to approve OP-1250, which could entail requirements for a medication guide, physician training and 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 applicable foreign regulatory authorities approve OP-1250 or any product candidate we develop in the future, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for OP-1250 will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as on-going compliance with cGMPs and GCP for any clinical trials that we conduct post-approval. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic, unannounced inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facilities where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. In addition, failure to comply with FDA, EMA and other comparable foreign regulatory requirements may subject our company to administrative or judicially imposed sanctions, including:

- delays in or the rejection of product approvals;
- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on the products, manufacturers or manufacturing process;
- warning letters;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production; and
- imposition of restrictions on operations, including costly new manufacturing requirements.

The occurrence of any event or penalty described above may inhibit our ability to commercialize OP-1250, or any product candidate we may develop in the future, and generate revenue and could require us to expend significant time and resources in response and could generate negative publicity.

The FDA's and other regulatory authorities' policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of OP-1250 or any product candidate we may develop in the future. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements 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.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the current U.S. administration may impact our business and industry. Namely, the current U.S. administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these executive actions, including the Executive Orders, will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If

these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, it may significantly harm our business, financial condition, results of operations and prospects.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If OP-1250 or any future product candidate we may develop is approved for marketing, and we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, such as OP-1250 or any future product candidates we may develop, if approved. In particular, a product may not be promoted for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. If we receive marketing approval for OP-1250 or any future product candidates we may develop, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability. The U.S. federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. If we cannot successfully manage the promotion of OP-1250 or any future product candidates we may develop, if approved, we could become subject to significant liability, which would significantly harm our business, financial condition, results of operations and prospects.

Disruptions at the FDA, EMA, applicable foreign regulatory authorities, the U.S. Securities and Exchange Commission, or the SEC, and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain 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, or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could significantly harm our business, financial condition, results of operations and prospects.

The ability of the FDA, EMA or any applicable foreign regulatory authority 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, and other events that may otherwise affect the FDA, EMA or any applicable foreign regulatory authority's ability to perform routine functions. Average review times at the agencies have fluctuated in recent years as a result and could be delayed by the COVID-19 pandemic or other factors. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those 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, in recent years, including in 2018 and 2019, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. Separately, in response to the COVID-19 pandemic, on March 10, 2020, the FDA announced its intention to postpone most inspections of foreign manufacturing facilities and products through April 2020. On March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities and provided guidance regarding the conduct of clinical trials. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, 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. Further, upon closing of this offering and in our operations as a public company, future government shutdowns or delays could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

We may attempt to secure approval from the FDA, EMA or comparable foreign regulatory authorities through the use of accelerated approval pathways. If we are unable to obtain such approval, we may be required to conduct additional nonclinical 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 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 comparable foreign regulatory authorities may seek to withdraw any accelerated approval.

We may in the future seek an accelerated approval for OP-1250 or future product candidates we may develop. Under the accelerated approval program, 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. Third-party payors may refuse to provide coverage or reimbursement for the drug until the confirmatory studies are complete. Additionally, if such post-approval studies fail to confirm the drug's clinical benefit, the FDA may withdraw its approval of the drug.

Prior to seeking accelerated approval for OP-1250, we intend to seek feedback from the FDA and will otherwise evaluate our ability to seek and receive 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 for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that after subsequent FDA feedback 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 or receive an expedited regulatory designation (e.g., breakthrough therapy designation) for OP-1250, there can be no assurance that such submission or application will be accepted or that any expedited development, review or approval will be granted on a timely basis, or at all. The FDA 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. A failure to obtain accelerated approval or any other form of expedited development, review or approval for OP-1250 would result in a longer time period to commercialization of such product candidate, could increase the cost of development of OP-1250 and could harm our competitive position in the marketplace.

We may face difficulties from changes to current regulations and future legislation.

Existing regulatory policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of OP-1250 or any future product candidates we may develop. We cannot predict the likelihood, nature or extent of government regulation that may arise from future 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 the adoption of new requirements 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.

For example, in March 2010, the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, was passed, which substantially changes the

way healthcare is financed by both the government and private insurers, and continues to significantly impact the U.S. pharmaceutical industry. There remain judicial and Congressional challenges to certain aspects of the ACA, as well as efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed several Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, several bills affecting the implementation of certain taxes under the ACA have passed. On December 22, 2017, President Trump signed into law federal tax legislation commonly referred to as the Tax Cuts and Jobs Act, or the Tax Act, which includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." In addition, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. The Bipartisan Budget Act of 2018 among other things, amended the ACA, effective January 1, 2019, to close the coverage gap in most Medicare Part D drug plans. In December 2018, CMS published a new final rule permitting further collections and payments to and from certain ACA-qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit ruled that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review the case, although it is unclear when a decision will be made or how the Supreme Court will rule. In addition, there may be other efforts to challenge, repeal or replace the ACA. We are continuing to monitor any changes to the ACA that, in turn, may potentially impact our business, financial condition, results of operations and prospects.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2030 unless additional congressional action is taken. The Coronavirus Aid, Relief and Economic Security Act, or CARES Act, which was signed into law in March 2020 and is designed to provide financial support and resources to individuals and businesses affected by the COVID-19 pandemic, suspended the 2% Medicare sequester from May 1, 2020 through December 31, 2020, and extended the sequester by one year, through 2030. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on potential customers for our drugs, if approved, and accordingly, our business.

Moreover, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted federal and state 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 drug products. For example, at the federal level, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. On March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly

out-of-pocket expenses, and place limits on pharmaceutical price increases. Additionally, the Trump administration's budget proposal for the fiscal year 2021 includes a \$135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. Further, on July 24, 2020, President Trump signed four additional Executive Orders designed to reduce the cost of drugs. Although a number of these and other measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented 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.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. 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 OP-1250 or any future product candidates we may develop. It is possible that additional governmental action is taken to address the COVID-19 pandemic.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for biotechnology products. 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 OP-1250 or any future product candidates we may develop, 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.

Our relationships with healthcare professionals, clinical investigators, CROs and third party payors in connection with our current and future business activities may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, government price reporting, and privacy and security laws (including health information privacy and security laws), which could expose us to, among other things, criminal sanctions, civil penalties, contractual damages, exclusion from governmental healthcare programs, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of our product candidate for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, clinical investigators, CROs, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our product for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal
- healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it in order to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the federal false claims and civil monetary penalties laws, including the civil False Claims Act, which can be enforced by private citizens through civil whistleblower or qui tam actions, prohibit individuals or entities from,

among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, prohibits, among other things, executing or attempting to execute a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, 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;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, also imposes obligations, including mandatory contractual terms, certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act requires applicable manufacturers of covered drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to annually report to CMS information regarding payments and other transfers of value to physicians, as defined by such law and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding payments and transfers of value provided, as well as ownership and investment interests held, during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists and certified nurse-midwives. The information reported is publicly available on a searchable website, with disclosure required annually; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require biotechnology companies to comply with the biotechnology industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. Some state laws require biotechnology companies to report information on the pricing of certain drug products. Some state and local laws require the registration of pharmaceutical sales representatives.

State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. For instance, the collection and use of health data in the European Union is governed by the General Data Protection Regulation, or the GDPR, which extends the enforcement of European Union data protection law to non-European Union entities under certain conditions, tightens existing European Union data protection principles, creates new obligations for companies and new rights for individuals. In particular, the GDPR includes obligations and restrictions concerning the consent and rights of individuals to whom the personal data relates, the transfer of personal data out of the European Economic Area, or EEA, or the United Kingdom, security breach notifications and the security and confidentiality of personal data. In addition to introducing new data protection requirements in the European Union, the GDPR also established potential fines for noncompliant companies. Failure to comply with the GDPR may result in substantial fines up to the greater of €20 million or 4% of annual global revenue and other administrative penalties. Such fines are in addition to any civil litigation claims by data subjects. European data protection authorities may interpret the GDPR and national laws differently and impose additional requirements, which contributes to the complexity of processing personal data in or from the EEA or United Kingdom. Guidance on implementation and compliance practices is often updated or otherwise revised. The GDPR may increase our responsibility and liability in relation to personal data that we process and we may be required

to put in place additional mechanisms ensuring compliance with the GDPR. This may be onerous and if our efforts to comply with GDPR or other applicable European Union laws and regulations are not successful, it could adversely affect our business in the European Union.

European data protection laws also generally prohibit the transfer of personal data from Europe, including the EEA, United Kingdom and Switzerland, to the United States and most other countries unless the parties to the transfer have implemented specific safeguards to protect the transferred personal data. One of the primary safeguards used for transfers of personal data from the European Union to the United States, namely, the Privacy Shield framework administered by the U.S. Department of Commerce, was recently invalidated by a decision of the European Union's highest court. The same decision also cast doubt on the ability to use one of the primary alternatives to the Privacy Shield, namely, the European Commission's Standard Contractual Clauses, to lawfully transfer personal data from Europe to the United States and most other countries. At present, there are few if any viable alternatives to the Privacy Shield and the Standard Contractual Clauses. To the extent that we were to rely on the EU-U.S. Privacy Shield Framework or the Standard Contractual Clauses, we will not be able to do so in the future, which could increase our costs and limit our ability to process personal data from the European Union.

Further, the vote in the United Kingdom in favor of exiting the European Union, referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, while the Data Protection Act of 2018, that "implements" and complements the GDPR achieved Royal Assent on May 23, 2018 and is now effective in the United Kingdom, it is still unclear whether transfer of data from the EEA to the United Kingdom will remain lawful under GDPR. During the period of "transition" (i.e., until December 31, 2020), European Union law will continue to apply in the United Kingdom, including the GDPR, after which the GDPR will be converted into United Kingdom law. Beginning in 2021, the United Kingdom will be a "third country" under the GDPR. We may, however, incur liabilities, expenses, costs, and other operational losses under GDPR and applicable European Union Member States and the United Kingdom privacy laws in connection with any measures we take to comply with them.

In addition, on June 28, 2018, the State of California enacted the California Consumer Privacy Act, or CCPA, which went into effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal information of consumers or households. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. While there is currently an exception for protected health information that is subject to HIPAA and clinical trial regulations, as currently written, the CCPA may impact certain of our business activities and may increase our compliance costs and potential liability. The CCPA was amended in September 2018 and November 2019, and it is possible that further amendments will be enacted, but even in its current form it remains unclear how various provisions of the CCPA will be interpreted and enforced. New legislation proposed or enacted in Illinois, Massachusetts, Nevada, New Jersey, New York, Rhode Island, Washington and other states, and a proposed right to privacy amendment to the Vermont Constitution, imposes, or has the potential to impose, additional obligations on companies that collect, store, use, retain, disclose, transfer and otherwise process confidential, sensitive and personal information, and will continue to shape the data privacy environment nationally. State laws are changing rapidly and there is discussion in Congress of a new federal data protection and privacy law to which we would become subject if it is enacted. All of these evolving compliance and operational requirements impose significant costs that are likely to increase over time, may require us to modify our data processing practices and policies, divert resources from other initiatives and projects, and could restrict the way products and services involving data are offered, all of which could significantly harm our business, financial condition, results of operations and prospects.

Many statutory requirements, both in the United States and abroad, include obligations for companies to notify individuals of security breaches involving certain personal information, which could result from breaches experienced by us or our third-party service providers. For example, laws in all 50 U.S. states and the District of Columbia require businesses to provide notice to consumers whose personal information 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. Moreover, states have been frequently amending existing laws, requiring attention to changing regulatory requirements. We also may be contractually required to notify customers or other counterparties of a security breach. Although we may have contractual protections with our third-party service providers, contractors and consultants, any actual or perceived security 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 third-party service providers, contractors or consultants 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.

We expect that there will continue to be new proposed laws and regulations concerning data privacy and security, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. New laws, amendments to or re-interpretations of existing laws, regulations, standards and other obligations may require us to incur additional costs and restrict our business operations. Because the interpretation and application of health-related and data protection laws, regulations, standards and other obligations are still uncertain, and often contradictory and in flux, it is possible that the scope and requirements of these laws may be interpreted and applied in a manner that is inconsistent with our practices and our efforts to comply with the evolving data protection rules may be unsuccessful. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. In addition, these privacy regulations may differ from country to country, and may vary based on whether testing is performed in the United States or in the local country and our operations or business practices may not comply with these regulations in each country.

In addition to the possibility of fines, lawsuits, regulatory investigations, public censure, other claims and penalties, and significant costs for remediation and damage to our reputation, we could be materially and adversely affected if legislation or regulations are expanded to require changes in our data processing practices and policies or if governing jurisdictions interpret or implement their legislation or regulations in ways that negatively impact our business. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business. Any inability to adequately address data privacy or security-related concerns, even if unfounded, or to comply with applicable laws, regulations, standards and other obligations relating to data privacy and security, could result in additional cost and liability to us, harm our reputation and brand, damage our relationships with customers and have a material adverse effect on our business.

Efforts to ensure that our current and future business arrangements with third parties will comply with applicable healthcare laws and regulations will involve on-going substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. 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 penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings and the curtailment or restructuring of our operations. Defending against any such actions can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired. Further, if any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers and vendors 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, consultants, commercial collaborators, principal investigators, CROs, suppliers and vendors may engage in misconduct or other improper activities.

Misconduct by these parties could include failures to comply with FDA regulations, provide accurate information to the FDA, comply with federal and state health care fraud and abuse laws and regulations, accurately report financial information or data or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, 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. Misconduct by these parties could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by these 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 comply with these laws or regulations. 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 penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings and the curtailment or restructuring of our operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could significantly harm our business, financial condition, results of operations or prospects.

We are subject to numerous 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. We also could incur significant costs associated with civil or criminal fines and penalties.

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 hazardous and flammable materials, including chemicals and biological materials.

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 may impair our research, development or commercialization efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Our research and development activities could be affected or delayed as a result of possible restrictions on animal testing.

Certain laws and regulations require us to test our product candidate on animals before initiating clinical trials involving humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted, delayed or become more expensive.

Our business activities may be subject to the U.S. Foreign Corrupt Practices Act, or the FCPA, and similar anti-bribery and anti-corruption laws of other countries in which we operate, as well as U.S. and certain foreign export controls, trade sanctions, and import laws and regulations. Compliance with these legal requirements could limit our ability to compete in foreign markets and subject us to liability if we violate them.

If we expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate. The FCPA generally prohibits companies and their employees and third party intermediaries from offering, promising, giving or authorizing the provision of anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, hospitals owned and operated by the government, and doctors and other hospital employees would be considered foreign officials under the FCPA. Recently the SEC and Department of Justice have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There is no certainty that all of our employees, agents or contractors, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, disgorgement, and other sanctions and remedial measures, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our product in one or more countries and could materially damage our reputation, our brand, our international activities, our ability to attract and retain employees and our business.

In addition, our product and activities may be subject to U.S. and foreign export controls, trade sanctions and import laws and regulations. Governmental regulation of the import or export of our product, or our failure to obtain any required import or export authorization for our product, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our product may create delays in the introduction of our product in international markets or, in some cases, prevent the export of our product to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments, and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, penalties could be imposed, including fines and/or denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons, or product targeted by such regulations, could result in decreased use of our product by, or in our decreased ability to export our product to existing or potential customers with international operations. Any decreased use of our product or limitation on our ability to export or sell access to our product would likely significantly harm our business, financial condition, results of operations and prospects.

Risks related to employee matters, managing our growth and other risks related to our business

The outbreak of the novel coronavirus disease, COVID-19, could adversely impact our business, including our nonclinical studies and clinical trials.

In December 2019, a novel strain of the coronavirus disease, COVID-19, was identified in Wuhan, China. This virus continues to spread globally and, as of September 2020, has spread to a number of countries, including the United States. The outbreak and government measures taken in response have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred; supply chains have been disrupted; facilities and production have been suspended; and demand for certain goods and services, such as medical services and supplies, has spiked, while demand for other goods and services, such as travel, has fallen. In response to the spread of COVID-19, we have closed our executive offices with our administrative employees

continuing their work outside of our offices and limited the number of staff in any given research and development laboratory. As a result of the COVID-19 pandemic, we experienced some delays in setting up our current Phase 1/2 clinical trial and in clinical site initiation, including delays in recruiting clinical site investigators and clinical site staff, which we may experience again in the future. Additionally, we may experience further disruptions that could severely impact our business, nonclinical studies and clinical trials, including:

- delays or difficulties in enrolling and retaining patients in our clinical trials;
- difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site data monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others or interruption of clinical trial subject visits and study procedures, which may impact the integrity of subject data and clinical study endpoints;
- interruption or delays in the operations of the FDA or other regulatory authorities, which may impact review and approval timelines;
- interruption of, or delays in receiving, supplies of OP-1250 from our contract manufacturing organizations, or CMO, due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- interruptions in nonclinical studies due to restricted or limited operations at our laboratory facility;
- limitations on employee resources that would otherwise be focused on the conduct of our nonclinical studies and clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people; and
- interruption or delays to our sourced discovery and clinical activities.

The COVID-19 pandemic continues to rapidly evolve. The extent to which the outbreak impacts our business, nonclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

Our success is highly dependent on our ability to attract and retain highly skilled executive officers and employees and key consultants.

To succeed, we must recruit, retain, manage and motivate qualified clinical, scientific, technical and management personnel, and we face significant competition for experienced personnel. We are highly dependent on the management, research and development, clinical, financial and business development expertise of our executive officers, as well as the other members of our scientific and clinical teams, including certain key consultants. For example, Dr. Pamela Klein, our Chief Medical Officer, is a consultant and not an employee. As a result, Dr. Klein may choose to reduce the amount of time she allocates to us, or to terminate her relationship with us, at any time and for any reason, which could impede the achievement of our research, development and commercialization objectives and significantly harm our business, financial condition, results of operations and prospects.

Furthermore, although we have employment offer letters with each of our executive officers, each of them may terminate their employment with us at any time. We do not maintain “key person” insurance for any of our executives or employees. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan and harm our operating results. In particular, the loss of one or more of our executive officers could be detrimental to us if we cannot recruit suitable replacements in a timely manner. The competition for qualified personnel in the biotechnology field is

intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the future success of our business. We could in the future have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment and retention efforts.

Many of the other biotechnology companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better prospects for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover, develop and commercialize OP-1250 or any other product candidate will be limited and the potential for successfully growing our business will be harmed.

If we are unable to establish sales or marketing capabilities or enter into agreements with third parties to sell or market OP-1250 or any product candidate we may develop in the future, we may not be able to successfully sell or market OP-1250 or any future product candidate we may develop that obtain regulatory approval.

We currently do not have, and have never had, a marketing or sales team. In order to commercialize any product candidates, if approved, we must build marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for each of the territories in which we may have approval to sell or market OP-1250 or any future product candidate we may develop. We may not be successful in accomplishing these required tasks.

Establishing an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize OP-1250 or any product candidate we may develop in the future will be expensive and time-consuming, and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities could adversely impact the commercialization of OP-1250 or any product candidate we may develop in the future that we obtain approval to market, if we do not have arrangements in place with third parties to provide such services on our behalf. Alternatively, if we choose to collaborate, either globally or on a territory-by-territory basis, 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 will be required to negotiate and enter into arrangements with such third parties relating to the proposed collaboration. If we are unable to enter into such arrangements when needed, on acceptable terms, or at all, we may not be able to successfully commercialize OP-1250 or any product candidate we may develop in the future which may receive regulatory approval or any such commercialization may experience delays or limitations. If we are unable to successfully commercialize our approved product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

We have never commercialized a product candidate before and may lack the necessary expertise, personnel and resources to successfully commercialize any products on our own or together with suitable collaborators.

We have never commercialized a product candidate, and we currently have no sales force, marketing or distribution capabilities. To achieve commercial success for a product candidate, which we may license to others, we will rely on the assistance and guidance of those collaborators. For any product candidates for which we retain commercialization rights, we will have to develop our own sales, marketing and supply organization or outsource these activities to a third party.

Factors that may affect our ability to commercialize OP-1250, or any future product candidate we may develop, on our own include recruiting and retaining adequate numbers of effective sales and marketing personnel, obtaining access to or persuading adequate numbers of physicians to prescribe OP-1250 or any future product candidates we may develop and other unforeseen costs associated with creating an independent sales and marketing organization. Developing a sales and marketing organization will be expensive and time-consuming and could delay the launch of OP-1250 or any future product candidate we may develop. We may not be able to build an

effective sales and marketing organization. If we are unable to build our own distribution and marketing capabilities or to find suitable partners for the commercialization of OP-1250 or any future product candidate we may develop, we may not generate revenues from such product candidate or be able to reach or sustain profitability.

In order to successfully implement our plans and strategies, we will need to grow the size of our organization, and we may experience difficulties in managing this growth.

As of September 30, 2020, we had 10 full-time employees, including seven employees engaged in research and development. In order to successfully implement our development and commercialization plans and strategies, and as we transition into operating as a public company, we expect to need additional managerial, operational, sales, marketing, financial and other personnel. Future growth would impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical, FDA, EMA and other comparable foreign regulatory agencies' review process for OP-1250 and any other future product candidates we may develop, while complying with any contractual obligations to contractors and other third parties we may have; and
- improving our operational, financial and management controls, reporting systems and procedures.

In addition, we expect to be conducting multiple clinical trials of OP-1250 for several different indications concurrently. Given the small size of our organization, we may encounter difficulties managing multiple clinical trials at the same time, which could negatively affect our ability to manage growth of our organization, particularly as we take on additional responsibility associated with being a public company. Our future financial performance and our ability to successfully develop and, if approved, commercialize, OP-1250 and any other future product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services, including key aspects of clinical development and manufacturing. We cannot assure you that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by third party service providers is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain marketing approval of OP-1250 and any other future product candidates we may develop or otherwise advance our business. We cannot assure you that we will be able to manage our existing third party service providers or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring new employees and/or engaging additional third party service providers, we may not be able to successfully implement the tasks necessary to further develop and commercialize OP-1250 and any other future product candidates we may develop and, accordingly, may not achieve our research, development and commercialization goals.

Our internal computer systems, or those of any of our CROs, manufacturers, other contractors, consultants, collaborators or potential future collaborators, may fail or suffer security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of our proprietary or confidential data, employee data, or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to our brand and material disruption of our operations.

Despite the implementation of preventative and detective security measures, our internal computer systems and those of our current and any future CROs and other contractors, consultants, collaborators and third-party

service providers, are vulnerable to damage or interruption from a variety of sources, including computer viruses, unauthorized access, accidental acts or omissions by those with authorized access, natural disasters, terrorism, war telecommunication and electrical failure, and cybersecurity threats (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information). The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity, and sophistication of attempted attacks and intrusions from around the world have increased. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies.

If such an event were to occur and cause interruptions in our operations or result in the unauthorized acquisition of or access to personally identifiable information or individually identifiable health information (violating certain privacy laws, as applicable, such as HIPAA, CCPA, HITECH and GDPR), it could result in a material disruption of our drug discovery and development programs and our business operations, whether due to a loss of our trade secrets or other similar disruptions. Some of the federal, state and foreign government requirements include obligations of companies to notify individuals of security breaches involving particular personally identifiable information, which could result from breaches experienced by us or by our vendors, contractors, or organizations with which we have formed strategic relationships. Notifications and follow-up actions related to a security breach could impact our reputation, cause us to incur significant costs, including legal expenses and remediation costs. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the lost data. We also rely on third parties to manufacture OP-1250, and similar events relating to their computer systems could also have a material adverse effect on our business. We may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data, or inappropriate disclosure of confidential or proprietary information, we could be exposed to litigation and governmental investigations, the further development and commercialization of OP-1250 could be delayed, and we could be subject to significant fines or penalties for any noncompliance with certain state, federal and/or international privacy and security laws.

Our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption, failure or security breach. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and could have high deductibles in any event, and defending a suit, regardless of its merit, could be costly and divert management attention.

EU drug marketing and reimbursement regulations may materially affect our ability to market and receive coverage for our product in the European member states.

We intend to seek approval to market OP-1250 in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for OP-1250, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the European Union, the pricing of drugs is subject to governmental control and other market regulations which could put pressure on the pricing and usage of OP-1250. 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 OP-1250 will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for OP-1250 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 European Union. The provision of benefits or advantages to physicians is governed by the national anti-bribery laws of EU Member States, such as the UK Bribery Act 2010. Infringement of these laws could result in substantial fines and imprisonment.

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 most foreign countries, including the EEA, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the European Union provides options for its member states 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 member states, can further reduce prices. A 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 OP-1250 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 biopharmaceutical products will allow favorable reimbursement and pricing arrangements for our product. Historically, products launched in the European Union 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 product is unavailable or limited in scope or amount, our potential revenues from sales and the potential profitability of OP-1250 in those countries would be negatively affected.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our suppliers, CROs and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, public health pandemics or epidemics (including, for example, the outbreak of COVID-19), and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations, increase our costs and expenses and significantly harm our business, financial condition, results of operations and prospects

Our ability to develop OP-1250 or any future product candidates we may develop could be disrupted if our operations or those of our suppliers are affected by man-made or natural disasters or other business interruptions. Our corporate headquarters are located in California near major earthquake faults and fire zones. The ultimate impact on us, our significant suppliers and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our operations and business could suffer in the event of a major earthquake, fire or other natural disaster.

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

Our net operating loss, or NOL, carryforwards could expire unused and be unavailable to offset future income tax liabilities because of their limited duration or because of restrictions under U.S. tax law. NOLs generated in tax years ending on or prior to December 31, 2017 are only permitted to be carried forward for 20 taxable years under applicable U.S. federal tax law. Under the Tax Act, as modified by the Coronavirus Aid, Relief, and Economic Security, or CARES, Act signed into law on March 27, 2020, NOLs arising in tax years beginning after December 31,

2017, and before January 1, 2021 may be carried back to each of the five tax years preceding the tax year of such loss, and NOLs arising in tax years beginning after December 31, 2020 may not be carried back. Moreover, under the Tax Act as modified by the CARES Act, federal NOLs generated in tax years ending after December 31, 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs may be limited to 80% of current year taxable income for tax years beginning on or after December 31, 2020. It is uncertain if and to what extent various states will conform to the Tax Act or the CARES Act.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change” (generally defined as a cumulative change in our ownership by “5-percent shareholders” that exceeds 50 percentage points over a rolling three-year period), the corporation’s ability to use its pre-change NOLs and certain other pre-change tax attributes to offset its post-change income and taxes may be limited. Similar rules may apply under state tax laws. We may have experienced such ownership changes in the past, and 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 our control. We have not conducted any studies to determine annual limitations, if any, that could result from such changes in the ownership. Our ability to utilize those NOLs could be limited by an “ownership change” as described above and consequently, we may not be able to utilize a material portion of our NOLs and certain other tax attributes, which could have a material adverse effect on our cash flows and results of operations.

A variety of risks associated with marketing OP-1250 or any future product candidate we may develop internationally could significantly harm our business, financial condition, results of operations and prospects.

We plan to seek regulatory approval of OP-1250 or any future product candidates we may develop outside of the United States and, accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including:

- differing regulatory requirements and reimbursement regimes in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other 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 taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the FCPA or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations may significantly harm our business, financial condition, results of operations and prospects.

Risks related to our intellectual property

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection in the United States and other countries for OP-1250, any future product candidates that we may

develop and technologies related to their various uses. We generally seek to protect our proprietary position by, among other things, filing patent applications in the United States and abroad related to OP-1250, our proprietary technologies, and their manufacture and uses that are important to our business, as well as inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position. We may also seek to protect our proprietary position by acquiring or in-licensing relevant issued patents or pending applications from third parties. If we or our potential licensors are unable to obtain or maintain patent protection with respect to OP-1250, proprietary technologies and their uses, our business, financial condition, results of operations and prospects could be significantly harmed.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, patents issue from such applications, and then only to the extent the issued claims cover the technology. There can be no assurance that our patent applications will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties.

Moreover, in the future, some of our owned patents and patent applications, or any future licensed patents or patent applications, may be co-owned with third parties. If we are unable to obtain exclusive licenses to any such co-owners' interest in such patents or patent applications, then such co-owners may be able to license their rights to other third 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 in order to enforce such patents against third parties, and such cooperation may not be provided to us.

Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. Thus, the degree of future protection for our proprietary rights is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. These uncertainties and/or limitations in our ability to properly protect the intellectual property rights relating to OP-1250 or any future product candidates we may develop could significantly harm our business, financial condition, results of operations and prospects.

We cannot be certain that the claims in our U.S. pending patent applications, and corresponding international patent applications, will be considered patentable by the United States Patent and Trademark Office, or USPTO, courts in the United States or by the patent offices and courts in foreign countries, nor can we be certain that the claims in our issued patent(s) will not be found invalid or unenforceable if challenged.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our potential future collaborators will be successful in protecting OP-1250 or any future product candidates we may develop by obtaining and defending patents. These risks and uncertainties include the following:

- patent applications must be filed in advance of certain events (e.g., third party filings, certain sales or offers for sale, or other activities that might be legally deemed to be public disclosures) and we might not be aware of such events or otherwise might not succeed in filing applications before they occur;
- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

The patent prosecution process is also expensive, time-consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection, for example, if patentable aspects are publicly disclosed, by us or a third party, such as by public use, sale or offer for sale, or publication.

In addition, although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, outside scientific collaborators, CROs, third-party manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. Further, although we require our employees, commercial contractors, and certain consultants and investigators to enter into invention assignment agreements that grant us ownership of any discoveries or inventions made by them while in our employ, we cannot guarantee that we have entered into such agreements with each party, we cannot provide any assurances that all such agreements have been duly executed, and any of these parties may breach such agreements and claim ownership in intellectual property that we believe is owned by us. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our owned or any licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions.

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. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. Should any of the above events occur, it could significantly harm our business, financial condition, results of operations and prospects.

If the scope of any patent protection we obtain is not sufficiently broad, or if we lose any of our patent protection, our ability to prevent our competitors from commercializing similar or identical product candidates would be adversely affected.

The patent positions of biopharmaceutical companies generally are highly uncertain, involve complex legal and factual questions for which important legal principles remain unsolved and have been the subject of much litigation in recent years. 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 OP-1250 or which effectively prevent others from commercializing competitive technologies and product candidates.

Moreover, the coverage claimed in a patent application can be significantly reduced before a patent is issued, and its scope can be reinterpreted after issuance. Legal standards relating to valid and enforceable claim scope are unsettled in the United States and elsewhere and disputes challenging or re-defining scope are common in the biopharmaceutical industry. Even if patent applications we own or in-license currently or in the future issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. Any patents that we own or in-license may be challenged or circumvented by third parties or may be narrowed or invalidated as a result of challenges by third parties. Consequently, we do not know whether OP-1250 or any future product candidates we may develop will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative

technologies or products in a non-infringing manner which could significantly harm our business, financial condition, results of operations and prospects.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad.

The process by which patent applications are examined and considered for issuance as patents involves consideration by the relevant patent office of “prior art” relative to the invented technology. Different countries have different rules about what information or events can be considered “prior art,” and different requirements regarding when a patent application must be filed relative to any particular piece of potential prior art. Moreover, legal decisions can re-interpret or change whether particular information or events are considered to be “prior art.” Still further, in the United States, patent applicants are required to notify the USPTO of any material “prior art” of which they are aware for the patent examiner to consider in addition to independent searches that the patent examiner is required to do. Also, in the United States and certain other jurisdictions, third parties are entitled to submit prior art to patent offices for consideration during examination.

We may not be aware of certain relevant prior art, may fail to identify or timely cite certain prior art, or may not be able to convince a patent examiner that our patent(s) should issue in light of the art. Also, we cannot be certain that all relevant art will be identified during examination of a patent application so that, even if a patent issues, it may be susceptible to challenge that it is not valid over art that was not considered during its examination.

We may be subject to a third-party pre-issuance submission of prior art to the USPTO or other jurisdictions, or become involved in post-grant challenges such as opposition, derivation, revocation, reexamination, post-grant review, or PGR, and *inter partes* review, or IPR, or other similar proceedings, or in litigation, challenging our patent rights, including by challenging the validity or the claim of priority of our patents. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate or render unenforceable, our patent rights, allow third parties to commercialize OP-1250 or any future product candidates we may develop and compete directly with us, without payment to us. Such challenges may result in loss of patent rights, loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of OP-1250 or any future product candidates 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, including art of which we were unaware, and art which was not raised during prosecution of any of our patent applications. 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 technology or platform, or any product candidates that we may develop. Such a loss of patent protection would significantly impact our business, financial condition, results of operations and prospects. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, or commercialize current or future product candidates or could embolden competitors to launch products or take other steps that could disadvantage us in the marketplace or draw us into additional expensive and time consuming disputes. Should any of these events occur, it could significantly harm our business, financial condition, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

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 or permit us to maintain our competitive advantage. For example:

- we may not be able to detect infringement of our issued patents;
- others may be able to develop products that are similar to OP-1250, or any future product candidates we may develop, but that are not covered by the claims of the patents that we may in-license in the future or own;

- our competitors may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use and sell OP-1250 or any future product candidates we may develop;
- we, or our current or future collaborators or license partners, might not have been the first to make the inventions covered by the issued patents or patent application that we may in-license in the future or own;
- we, or our current or future collaborators or license partners, might be found not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that the pending patent applications we may in-license in the future or own will not lead to issued patents;
- it is possible that there are prior public disclosures that could invalidate our patents, or parts of our patents, for which we are not aware;
- issued patents that we hold rights to may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- issued patents may not have sufficient term or geographic scope to provide meaningful protection;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may have an adverse effect on our business; and
- we may choose not to file a patent in order to maintain certain trade secrets, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, it could significantly harm our business, financial condition, results of operations and prospects.

Our commercial success depends significantly on our ability to operate without infringing, misappropriating or otherwise violating the patents and other proprietary rights of third parties. Claims by third parties that we infringe, misappropriate or otherwise violate their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

Our commercial success depends in part on avoiding infringement, misappropriation or other violations of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe, misappropriate or otherwise violate patents or other intellectual property rights owned or controlled by third parties. A finding by a court or administrative body that we infringe the claims of issued patents owned by third parties could preclude us from commercializing OP-1250 or any future product candidates we may develop.

Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import OP-1250 or any future product candidates we may develop and products that may be approved in the future, or impair our competitive position. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biopharmaceutical industry, including patent infringement lawsuits, and proceedings, such as oppositions, reexaminations, IPR proceedings and PGR proceedings, before the USPTO and/or corresponding foreign patent offices. In addition, many companies in intellectual property-dependent industries, including the biopharmaceutical industry, have employed intellectual property litigation as a means to gain an advantage over their competitors. Numerous third-party U.S. and foreign issued patents and pending patent applications may exist in the fields in which we are developing OP-1250 or any future product candidates we may develop. There may be third-party patents or

patent applications with claims to compositions, formulations, methods of manufacture or methods for treatment related to the use or manufacture of OP-1250 or any future product candidates we may develop. For example, we are aware of certain third party patent applications and patents in the United States and abroad that include disclosure of chemical structures sharing certain similarities with OP-1250. It is possible that one or more of such third parties could pursue patent claims or assert patent claims that allegedly encompass OP-1250.

It is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we may be unable to develop, manufacture, market, sell and commercialize products or services or perform research and development or other activities covered by these patents. In the event that any of these patents were to issue and be asserted against us, we believe that we would have defenses against any such assertion, including that such patents are not valid. However, if such defenses to such assertion were unsuccessful, we could be liable for damages, which could be significant and include treble damages and attorneys' fees if we are found to willfully infringe such patents. We could also be required to obtain a license to such patents, which may not be available on commercially reasonable terms or at all. If we are unable to obtain such a license, we could be precluded from commercializing any product candidates that were ultimately held to infringe such patents.

As the biopharmaceutical industry expands and more patents are issued, the risk increases that OP-1250, or any future product candidates we may develop, may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential for a certain period of time, until the relevant application is published, we may be unaware of third-party patents that may be infringed by commercialization of OP-1250, or any future product candidates we may develop, and we cannot be certain that we were the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently-pending patent applications that may later result in issued patents that OP-1250 or any future product candidates we may develop may infringe. In addition, identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. There is also no assurance that there is not prior art of which we are aware, but which we do not believe is relevant to our business, which may, nonetheless, ultimately be found to limit our ability to make, use, sell, offer for sale or import our products that may be approved in the future, or impair our competitive position. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Still further, we cannot rely on our experience that third parties have not so far alleged that we infringe their patent rights, as provisions of U.S. patent laws provide a safe harbor from patent infringement for therapeutic products under clinical development. If and when we submit an NDA that safe harbor will expire.

Any claims of patent infringement, misappropriation or other violations asserted by third parties would be time consuming and could:

- result in costly litigation that may cause negative publicity;
- divert the time and attention of our technical personnel and management;
- cause development delays;
- prevent us from commercializing OP-1250 or any future product candidates we may develop;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis;
- subject us to significant liability to third parties; or
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all, or which might be non-exclusive, which could result in our competitors gaining access to the same technology.

Any patent-related legal action against us claiming damages or seeking to enjoin commercial activities relating to our products, or processes could subject us to significant liability for damages, including treble damages if we

were determined to willfully infringe, and require us to obtain a license to manufacture or market OP-1250 or any future product candidates we may develop. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. We cannot predict whether we would prevail in any such actions or that any license required under any of these patents would be made available on commercially acceptable terms, if at all. Moreover, even if we or a future strategic partner were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we cannot be certain that we could redesign OP-1250 or any future product candidates we may develop processes to avoid infringement, if necessary.

An adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing and commercializing OP-1250 or any future product candidates we may develop, which could significantly harm our business, financial condition and operating results. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing OP-1250 and future product candidates and technologies.

Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on our ability to raise additional funds or otherwise significantly harm our business, financial condition, results of operations and prospects.

We may not be successful in obtaining or maintaining necessary rights from third parties for that we identify as necessary for OP-1250 through acquisitions and in-licenses.

Because our development 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.

While we may have issued patents that cover OP-1250, it is possible that third parties may have blocking patents that prevent us from marketing, manufacturing or commercializing our own patented products and practicing our own patented technology.

We may be unsuccessful in acquiring or in-licensing compositions, methods of use, processes, or other intellectual property rights from third parties that we identify as necessary for practicing inventions claimed by our patents, including the manufacture, sale and use of OP-1250 and any future product candidates we may develop. 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 significantly harm our business, financial condition, results of operations and prospects.

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 or other third parties may infringe, misappropriate or otherwise violate our intellectual property rights. To prevent infringement or unauthorized use, we may be required to file infringement or other intellectual property claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we may in-license in the future or own is not valid, is unenforceable, and/or is not

infringed, or may refuse to stop the other party from using the technology at issue on the grounds that our owned patents or future in-licensed patents do not cover the technology in question. If we or any of our potential future collaborators were to initiate legal proceedings against a third party to enforce a patent directed at OP-1250 or any future product candidates we may develop, the defendant could counterclaim that our 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 lack of novelty, obviousness, written description, non-enablement, or obviousness-type double patenting. 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.

The outcome following legal assertions of invalidity and/or unenforceability is unpredictable, and prior art could render our patent invalid. There is no assurance that all potentially relevant prior art relating to our patent and patent applications has been found. 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 patent and patent applications, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim.

If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we may lose at least part, and perhaps all, of the patent protection on such product candidate. 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 current or future product candidates. Such a loss of patent protection would significantly harm 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. 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. 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.

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.

Should any of these events occur, it could significantly harm our business, financial condition, results of operations and prospects.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common shares to decline.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our existing products, programs or intellectual property could be diminished. Accordingly, the market price of shares of our common stock may decline. Such announcements could also harm our reputation or the market for our future products, which could significantly harm our business, financial condition, results of operations and prospects.

Derivation proceedings may be necessary to determine priority of inventions, and an unfavorable outcome may require us to cease using the related technology or to attempt to license rights from the prevailing party.

Derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party.

Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with such proceedings could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring OP-1250 or any future product candidates to market. Should any of these events occur, it could significantly harm our business, financial condition, results of operations and prospects.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications or those of our licensors and the enforcement or defense of our issued patents or those of our licensors.

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a “first inventor to file” system in which, assuming that other requirements of patentability are met, the first inventor to file a patent application will be entitled to the patent regardless of whether a third party was first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013 but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Furthermore, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our technology and the prior art allow our technology to be patentable over the prior art. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we may not be certain that we or our licensors are the first to either (1) file any patent application related to OP-1250 or any future product candidate we may develop or (2) invent any of the inventions claimed in the patents or patent applications.

The Leahy-Smith Act also includes a number of significant changes that affect the way patent applications will be prosecuted and also may affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO-administered post-grant proceedings, including PGR, IPR and derivation proceedings. An adverse determination in any such submission or proceeding could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position.

Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Thus, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications or those of our licensors and the enforcement or defense of our issued patents or those of our licensors, all of which could significantly harm our business, financial condition, results of operations and prospects.

Changes in U.S. patent law, or laws in other countries, could diminish the value of patents in general, thereby impairing our ability to protect OP-1250 or any future product candidates we may develop.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve a high degree of technological and legal complexity. Therefore, obtaining and enforcing biopharmaceutical patents is costly, time consuming and inherently uncertain. Changes in either the patent laws or in the interpretations of patent laws in the United States and other countries may diminish our ability to protect our inventions, obtain,

maintain and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property. Such changes may also increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. In addition, Congress or other foreign legislative bodies may pass patent reform legislation that is unfavorable to us.

Further, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the U.S. federal courts, the USPTO, or similar authorities in foreign jurisdictions, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patent and the patents we might obtain or license in the future. Any of the foregoing could significantly harm our business, financial condition, results of operations, and prospects.

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

It is possible that we do not perfect ownership of all patents, patent applications or other intellectual property. This possibility includes the risk that we do not identify all inventors, or identify incorrect inventors, which may lead to claims disputing inventorship or ownership of our patents, patent applications or other intellectual property by former employees or other third parties. There is also a risk that we do not establish an unbroken chain of title from inventors to us. Errors in inventorship or ownership can sometimes also impact priority claims. If we were to lose ability to claim priority for certain patent filings, intervening art or other events may preclude us from issuing patents.

Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Such an outcome could significantly harm our business, financial condition, results of operations and prospects. Even if we are successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

Patent terms may be inadequate to protect our competitive position on OP-1250 or any future product candidates we may develop for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but there can be no assurance that any such extensions will be obtained, and the life of a patent, and the protection it affords, is limited. Even if patents covering OP-1250 or any future product candidates we may develop are obtained, once the patent life has expired, we may be open to competition from competitive products. 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. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

In the United States, patent term can be adjusted due to delays that occur during examination of patent applications, which may extend the term of a patent beyond 20 years. There is a risk that we may take action that detracts from any accrued patent term adjustment.

It is necessary to pay certain maintenance fees, also referred to as annuities or renewal fees in some countries, throughout the lifetime of a patent at regular intervals. Failure to pay these fees can cause a granted patent to prematurely expire, without an opportunity for revival. There is a risk that we may be unable to maintain patent protection for certain patents in all markets due to finite availability of resources.

Any of the foregoing could significantly harm our business, financial condition, results of operations and prospects.

If we do not obtain patent term extension for OP-1250 or any future product candidates we may develop, our business, financial condition, results of operations and prospects may be significantly harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of OP-1250 or any future product candidates we may develop, one or more of our U.S. patents or those of our licensors may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. A maximum of one patent may be extended per FDA approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension may also be available in certain foreign countries upon regulatory approval of OP-1250 or any future product candidates we may develop. 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 time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations and prospects could be significantly harmed. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and nonclinical data and launch their product earlier than might otherwise be the case.

We will not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States may be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we will not be able to prevent third parties from practicing our inventions in all countries outside the United States or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These infringing products may compete with OP-1250 or any future product candidates we may develop, without any available recourse.

The laws of some other countries do not protect intellectual property rights to the same extent as the laws of the United States. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. In addition, the legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to biopharmaceuticals. As a result, many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. Because the legal systems of many foreign countries do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceutical products, it could be difficult for us to stop the infringement, misappropriation or violation of our patents or our licensors' patents or marketing of competing products in violation of our proprietary rights. Proceedings to enforce our intellectual property and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents or the patents of our licensors at risk of being invalidated or interpreted narrowly, could put our patent applications or the patent applications of our licensors

at risk of not issuing and could provoke third parties to assert claims 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. 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.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be significantly harmed.

Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, fee payment, and other requirements imposed by regulations and governmental 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 governmental fees on patents and/or applications will be due to the USPTO and various foreign patent offices at various points over the lifetime of our patents and/or patent applications. We have systems in place to remind us to pay these fees, and we rely on our outside patent annuity service to pay these fees when due. Additionally, the USPTO and various foreign patent offices require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, there are situations in which noncompliance 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. If such an event were to occur, potential competitors might be able to enter the market with similar or identical products or technology, which could significantly harm our business, financial condition, results of operations and prospects.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business, financial condition, results of operations and prospects could be significantly harmed.

We intend to use registered or unregistered trademarks or trade names to brand and market ourselves and our products. Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. 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 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. 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, financial condition, results of operations and prospects may be significantly harmed. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could significantly harm our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, our business, financial condition, results of operations, prospects and competitive position would be significantly harmed.

In addition, we rely on the protection of our trade secrets, including unpatented know-how, technology and other proprietary information to maintain our competitive position. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties,

and confidential information and inventions agreements with employees, consultants and advisors, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology or processes. Further, we cannot provide any assurances that all such agreements have been duly executed, and any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, or claim ownership in intellectual property that we believe is owned by us. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, 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. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets.

Moreover, 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. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced, and our competitive position would be harmed. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized. Any of the foregoing could significantly harm our business, financial condition, results of operations and prospects.

We may be subject to claims that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets.

We have entered into and may enter in the future into non-disclosure and confidentiality agreements to protect the proprietary positions of third parties, such as outside scientific collaborators, CROs, third-party manufacturers, consultants, advisors, potential partners, lessees of shared multi-company property and other third parties. Many of our employees and consultants were previously employed at, or may have previously provided or may be currently providing consulting services to, other biopharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, and advisors do not use the proprietary information or know-how of others in their work for us, we may become subject to litigation where a third party asserts that we or our employees or consultants inadvertently or otherwise breached the agreements and used or disclosed trade secrets or other information proprietary to the third parties. Defense of such matters, regardless of their merit, could involve substantial litigation expense and be a substantial diversion of employee resources from our business. We cannot predict whether we would prevail in any such actions. Moreover, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing OP-1250 or any future product candidates or technologies we may develop. Failure to defend against any such claim could subject us to significant liability for monetary damages or prevent or delay our developmental and commercialization efforts, and cause us to lose valuable intellectual property rights or personnel, which could significantly harm our business, financial condition, results of operations and prospects. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team and other employees.

Parties making claims against us may be able to sustain the costs of complex intellectual property litigation more effectively than we can. 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. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise significantly harm our business, financial condition, results of operations and prospects.

Our rights to develop and commercialize our technology and product candidate may be subject, in part, to the terms and conditions of licenses granted to us by others.

We may enter into license agreements in the future with others to advance our research or allow commercialization of OP-1250 or any future product candidates we may develop. These and other 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 and products in the future. As a result, we may not be able to prevent competitors from developing and commercializing competitive products in territories included in our licenses.

If we fail to comply with our obligations under any such license agreements, including obligations to make various milestone payments and royalty payments and other obligations, the licensor may have the right to terminate the license. If these agreements are terminated, we could lose intellectual property rights that are important to our business, be liable for any damages to such licensors or be prevented from developing and commercializing our product candidates, and competitors could have the freedom to seek regulatory approval of, and to market, products identical to ours. Termination of these agreements or reduction or elimination of our rights under these agreements may also result in our being required to negotiate new or reinstated agreements with less favorable terms, cause us to lose our rights under these agreements, including our rights to important intellectual property or technology, or impede, delay or prohibit the further development or commercialization of one or more product candidates that rely on such agreements. It is possible that we may be unable to obtain any additional licenses at a reasonable cost or on reasonable terms, if at all. In that event, we may be required to expend significant time and resources to redesign our 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.

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, including the payment of all applicable fees for patents covering our product candidates. If our licensors fail to prosecute, maintain, enforce and defend such patents, 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 products that are subject of such licensed rights could be adversely affected. Further, 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 the prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by the actions or inactions of our licensees, our licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

Our licensors may have relied on third party consultants or collaborators or on funds from third parties such that our licensors are not the sole and exclusive owners of the patents we in-licensed. If other third parties have ownership rights to our 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 condition, results of operations and prospects.

We may need to obtain additional licenses from existing licensors and others to advance our research or allow commercialization of product candidates we develop. It is possible that we may be unable to obtain additional 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 significantly 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. Should any of these events occur, it could significantly harm our business, financial condition, results of operations and prospects.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

Disputes may arise between us and our current or 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 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 significantly harm our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could significantly harm our business, financial condition and prospects.

In spite of our best efforts, our licensors might conclude that we have 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 significantly harm our competitive position, business, financial condition and prospects.

Intellectual property discovered through government funded programs may be subject to federal regulations such as “march-in” rights, certain reporting requirements and a preference for U.S.-based companies. Compliance with such regulations may limit our exclusive rights and limit our ability to contract with non-U.S. manufacturers.

We may develop, acquire, or license intellectual property rights that have been generated through the use of U.S. government funding or grants. Pursuant to the Bayh-Dole Act of 1980, the U.S. government has certain rights in inventions developed with government funding. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (1) adequate steps have not been taken to commercialize the invention; (2) government action is necessary to meet public health or safety needs; or (3) government action is necessary to meet requirements for public use under federal regulations (also referred to as “march-in rights”). If the U.S. government exercised its march-in rights in our future intellectual property rights that are generated through the use of U.S. government funding or

grants, we could be forced to license or sublicense intellectual property developed by us or that we license on terms unfavorable to us, and there can be no assurance that we would receive compensation from the U.S. government for the exercise of such rights. The U.S. government also has the right to take title to these inventions if the grant recipient fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U.S. government requires that any products embodying any of these inventions or produced through the use of any of these inventions be manufactured substantially in the United States. This preference for U.S. industry may be waived by the federal agency that provided the funding if the owner or assignee of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. industry may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property. Any exercise by the government of any of the foregoing rights could harm our competitive position, business, financial condition, results of operations and prospects.

Risks related to our dependence on third parties

We rely, and expect to continue to rely, on third parties, including independent clinical investigators and CROs, to conduct certain aspects of our nonclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize OP-1250 or future product candidates we may develop and our business, financial condition, results of operations and prospects could be significantly harmed.

We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct certain aspects of our nonclinical studies and clinical trials and to monitor and manage data for our ongoing nonclinical and clinical programs. We rely on these parties for execution of our nonclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party contractors and CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for OP-1250 in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties or our CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be adversely affected if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Further, these investigators and CROs are not our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to OP-1250 and clinical trials. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other product development activities, which could affect their performance on our behalf. If independent investigators or CROs fail to devote sufficient resources to the development of OP-1250, or if CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully

commercialize OP-1250. As a result, our results of operations and the commercial prospects for OP-1250 would be harmed, our costs could increase and our ability to generate revenues could be delayed or precluded entirely, and our business, financial condition, results of operations and prospects could be significantly harmed.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated.

The COVID-19 pandemic and government measures taken in response have also had a significant impact on our CROs, and we expect that they will face further disruption which may affect our ability to initiate and complete our nonclinical studies and clinical trials.

If any of our relationships with these third-party CROs terminate, 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 additional 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 materially impact our ability to meet our desired clinical development timelines. Additionally, CROs may lack the capacity to absorb higher workloads or take on additional capacity to support our needs. There can be no assurance that we will not encounter challenges or delays with CROs in the future or that these delays or challenges will not significantly harm our business, financial condition, results of operations and prospects.

We contract with third parties for the manufacture of OP-1250 for nonclinical studies and our ongoing clinical trials, and expect to continue to do so for additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of OP-1250 or other drugs necessary for the development or commercialization of OP-1250 or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently have the infrastructure or internal capability to manufacture supplies of OP-1250 for use in development and commercialization. We rely, and expect to continue to rely, on third-party manufacturers for the production of OP-1250 for nonclinical studies and clinical trials under the guidance of members of our organization. We do not have long-term supply agreements for OP-1250. Furthermore, the raw materials for OP-1250 are sourced, in some cases, from a single-source supplier. If we were to experience an unexpected loss of supply of OP-1250 for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials. For example, the extent to which the COVID-19 pandemic impacts our ability to procure sufficient supplies for the development of OP-1250 in the future will depend on the severity and duration of the spread of the virus, and the actions undertaken to contain COVID-19 or treat its effects.

We expect to continue to rely on third-party manufacturers for the commercial supply of OP-1250, if we obtain marketing approval. We may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture OP-1250 according to our schedule, or at all, including if our third-party contractors give greater priority to the supply of other products over OP-1250 or otherwise do not satisfactorily perform according to the terms of the agreements between us and them;
- disruptions resulting from the impact of public health pandemics or epidemics (including, for example, the ongoing COVID-19 pandemic);
- the reduction or termination of production or deliveries by suppliers, or the raising of prices or renegotiation of terms;
- the termination or nonrenewal of arrangements or agreements by our third-party contractors at a time that is costly or inconvenient for us;

- the breach by the third-party contractors of our agreements with them;
- the failure of third-party contractors to comply with applicable regulatory requirements;
- the failure of the third party to manufacture OP-1250 according to our specifications;
- the mislabeling of clinical supplies, potentially resulting in the wrong dose amounts being supplied or active drug or placebo not being properly identified;
- clinical supplies not being delivered to clinical sites on time, leading to clinical trial interruptions, or of drug supplies not being distributed to commercial vendors in a timely manner, resulting in lost sales; and
- the misappropriation of our proprietary information, including our trade secrets and know-how.

We do not have control over all aspects of the manufacturing process of, and are dependent on, our contract manufacturing partners for compliance with cGMP regulations for manufacturing both active drug substances and finished drug products. Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or others, they will not be able to secure and/or maintain marketing approval for their manufacturing facilities. In addition, we do not have control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of OP-1250, or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain marketing approval for or market OP-1250, if approved. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of OP-1250 or other drugs necessary for the development or commercialization of OP-1250 and significantly harm our business, financial condition, results of operations and prospects.

Furthermore, if the third-party providers of therapies or therapies in development used in combination with OP-1250 are unable to produce sufficient quantities for clinical trials or for commercialization of OP-1250, or if the cost of combination therapies are prohibitive, our development and commercialization efforts would be impaired, which would significantly harm our business, financial condition, results of operations and prospects. For example, for our planned Phase 1b clinical trial of OP-1250 in combination with ribociclib or alpelisib, or the Novartis Study Drugs, in patients with metastatic ER+ breast cancer, we entered into a Clinical Collaboration and Supply Agreement with Novartis Institutes for BioMedical Research, Inc., or Novartis, or the Novartis Agreement. Under the terms of the Novartis Agreement, Novartis is providing ribociclib (Kisqali®) and alpelisib (Piqray®) for the clinical trial. If Novartis is unable to timely manufacture or provide ribociclib or alpelisib, or if the Novartis Agreement terminates and we are unable to obtain ribociclib or alpelisib on the current terms, our planned Phase 1b clinical trial may be delayed and the cost to us to conduct this trial may significantly increase, which would significantly harm our business, financial condition, results of operations and prospects. For a description of the Novartis Agreement, see the section titled “Business — Clinical Trial Collaboration and Supply Agreement with Novartis.”

Our current and anticipated future dependence upon others for the manufacture of OP-1250 or other drugs necessary for the development or commercialization of OP-1250 may adversely affect our future profit margins and our ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

The manufacture of drugs is complex and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide adequate supply of OP-1250 for clinical trials or our product for patients, if approved, could be delayed or prevented.

Manufacturing drugs, especially in large quantities, is complex and may require the use of innovative technologies. Each lot of an approved drug product must undergo thorough testing for identity, strength, quality, purity and

potency. Manufacturing drugs requires facilities specifically designed for and validated for this purpose, and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide nonclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of our manufacturer, 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 significantly harm our business, financial condition, results of operations and prospects. The use of biologically derived ingredients can also lead to allegations of harm, including infections or allergic reactions, or closure of product facilities due to possible contamination. If our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization as a result of these challenges, or otherwise, our development and commercialization efforts would be impaired, which would significantly harm our business, financial condition, results of operations and prospects.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

From time to time, we may evaluate various acquisition opportunities and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and marketing approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions or pursue partnerships in the future, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities, and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

We have entered into collaborations with third parties for the development and commercialization of OP-1250. If those collaborations are not successful, we may not be able to capitalize on the market potential of OP-1250.

We have third-party collaborators for the development and commercialization of OP-1250. Our likely collaborators for any future collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies.

We have, and will likely continue to have, limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of OP-1250. Our ability to generate revenues

from these arrangements will depend on our collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements. Collaborations involving OP-1250 could pose numerous risks to us, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations and may not perform their obligations as expected;
- collaborators may deemphasize or not pursue development and commercialization of OP-1250 or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus, including as a result of a sale or disposition of a business unit or development function, 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 OP-1250 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;
- a collaborator with marketing and distribution rights to multiple products may not commit sufficient resources to the marketing and distribution of our product relative to other products;
- collaborators may not properly obtain, maintain, defend or enforce our intellectual property rights or may use our proprietary information and intellectual property in such a way as to invite litigation or other intellectual property related proceedings that could jeopardize or invalidate our proprietary information and intellectual property or expose us to potential litigation or other intellectual property related proceedings;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of OP-1250 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 to pursue further development or commercialization of the applicable product candidates;
- collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all; and
- if a collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our drug development or commercialization program could be delayed, diminished or terminated.

If we decide to establish collaborations in the future, but are not able to establish those collaborations on commercially reasonable terms, we may have to alter our development and commercialization plans.

Our drug development programs and the potential commercialization of OP-1250 or any future product candidates we may develop will require substantial additional cash to fund expenses. We may continue to seek to selectively form collaborations to expand our capabilities, potentially accelerate research and development activities and provide for commercialization activities by third parties. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders, or disrupt our management and business.

If we seek collaborations in the future, we will face significant competition in seeking appropriate collaborators and the negotiation process is time-consuming and complex. Whether we 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 a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA, EMA or comparable foreign regulatory authorities, the potential market for the subject product candidate,

the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing drugs, the existence of uncertainty with respect to our ownership of intellectual property and industry and market conditions generally. The potential collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such collaboration could be more attractive than the one with us for OP-1250 or any future product candidates we may develop. Further, we may not be successful in our efforts to establish a collaboration or other alternative arrangements for future 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 them as having the requisite potential to demonstrate safety and efficacy.

In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Even if we are successful in entering into a collaboration, the terms and conditions of that collaboration may restrict us from entering into future agreements on certain terms with potential collaborators.

If and when we seek to enter into additional collaborations, we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development 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 OP-1250 or any future product candidates we may develop or bring them to market and generate product revenue.

Risks related to this offering and ownership of our common stock

There has been no prior public market for our common stock. 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, no public market for shares of our common stock existed and an active trading market for our common stock may never develop or be sustained following this offering. We will determine the initial public offering price for our common stock through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of our common stock after this offering. The market value of our common stock may decrease from the initial public offering price. As a result of these and other factors, you may be unable to resell your shares of our common stock at or above the initial public offering price. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. Furthermore, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic collaborations or acquire companies, technologies or other assets by using our shares of common stock as consideration.

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock following this offering is likely to be highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. The stock market in general, and pharmaceutical and biotechnology 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. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- the timing and results of nonclinical studies and clinical trials of OP-1250 or any future product candidates we may develop or those of our competitors;

- the success of competitive products or announcements by potential competitors of their product development efforts;
- regulatory actions with respect to our product candidate or our competitors' products;
- actual or anticipated changes in our growth rate relative to our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- market conditions in the pharmaceutical and biotechnology sector;
- changes in the structure of healthcare payment systems;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- expiration of market stand-off or lock-up agreements; and
- general economic, industry and market conditions.

In addition, the trading prices for common stock of other biopharmaceutical companies have been highly volatile as a result of factors unrelated to the specific company or its technology, as well as due to the COVID-19 pandemic. The COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business, nonclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

The realization of any of the above risks or any of a broad range of other risks, including those described in this "Risk Factors" section, could have a dramatic and adverse impact on the market price of our common stock.

If securities or industry analysts do not publish research or reports, or if they publish adverse or misleading research or reports, regarding us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that securities or industry analysts publish about us, our business or our market. We do not currently have and may never obtain research coverage by securities or industry analysts. If no or few securities or industry analysts commence coverage of us, the stock price would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue adverse or misleading research or reports regarding us, our business model, our intellectual property, our stock performance or our market, or if our operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Our quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- timing and variations in the level of expense related to the ongoing development of OP-1250 or future development programs;
- timing and status of enrollment for our clinical trials;
- impacts from the COVID-19 pandemic on us or third parties with which we engage;
- results of clinical trials, or the addition or termination of clinical trials or funding support by us or potential future partners;
- our execution of any collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under potential future arrangements or the termination or modification of any such potential future arrangements;
- any intellectual property infringement, misappropriation or violation lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- if OP-1250 or any future product candidate we may develop receive regulatory approval, the timing and terms of such approval and market acceptance and demand for such product candidates;
- the timing and cost to establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval and intend to commercialize on our own or jointly with current or future collaborators;
- regulatory developments affecting OP-1250 or any future product candidate we may develop or those of our competitors; and
- changes in general market and economic conditions.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Prior to this offering, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately _____ % of our voting stock and, upon the closing of this offering, that same group will beneficially own approximately _____ % of our outstanding voting stock (based on the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and assuming no exercise of the underwriters' option to purchase additional shares). Therefore, even after this offering these stockholders will be able to significantly influence us through this ownership position. These stockholders may be able to determine 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 may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders. The interests of this group of stockholders may not always coincide with your interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their common stock, and might affect the prevailing market price for our common stock.

If you purchase shares of our common stock in our initial public offering, you will experience substantial and immediate dilution.

The initial public offering price is substantially higher than the net tangible book value per share of our outstanding common stock immediately following the closing of this offering. Based on the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, if you purchase shares of common stock in this offering, you will experience substantial and immediate dilution in the pro forma as adjusted net tangible book value per share of \$ _____ per share as of September 30, 2020. That is because the price that you pay will be substantially greater than the pro forma 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 when those holding stock options or warrants exercise their right to purchase common stock under our equity incentive plans or when we otherwise issue additional shares of common stock. See the section titled "Dilution."

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

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

Upon the closing of this offering, _____ shares of common stock (including (i) 66,257,144 shares issuable upon the conversion of all outstanding shares of our convertible preferred stock as of September 30, 2020 and (ii) 2,496,352 shares of unvested restricted common stock subject to repurchase as of such date) will be outstanding (_____ shares if the underwriters exercise their option to purchase additional shares from us in full), based on the number of shares outstanding as of _____, 2020.

All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless held by our "affiliates" as defined in Rule 144 under the Securities Act. The resale of the remaining _____ shares, or _____ % of our outstanding shares of common stock following this offering, is currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by certain of our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters in connection with this offering. However, subject to applicable securities law restrictions, these shares will be able to be sold in the public market beginning 181 days after the date of this prospectus. The representatives of the underwriters may release some or all of the shares of common stock subject to lock-up agreements at any time in their sole discretion and without notice, which would allow for earlier sales of shares in the public market. Shares issued upon the exercise of stock options and warrants outstanding 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, market stand-off agreements and/or lock-up agreements, as well as Rules 144 and 701 under the Securities Act. For more information, see the section titled "Shares Eligible for Future Sale."

Upon the closing of this offering, the holders of approximately _____ shares of common stock, or _____ % of our outstanding shares following this offering, will have rights, subject to certain 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 our other stockholders. We also intend to register the offer and sale of all shares of 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 that may be issued under our equity incentive plans, these shares will be able to be sold in the public market upon issuance, subject to applicable securities laws and the lock-up agreements described under "Underwriters."

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

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to OP-1250 or future product candidates we may develop on unfavorable terms to us.

We may seek additional capital through a variety of means, including through public or private equity, debt financings or other sources, including up-front payments and milestone payments from strategic collaborations. To the extent that we raise additional capital through the sale of equity or convertible debt or equity securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. Such financing may result in dilution to stockholders, imposition of debt covenants, increased fixed payment obligations or other restrictions that may affect our business. If we raise additional funds through up-front payments or milestone payments pursuant to strategic collaborations with third parties, we may have to relinquish valuable rights to OP-1250 or future product candidates we may develop, or grant licenses on terms that are not favorable to us. 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.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an emerging growth company, we intend to take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- being permitted to provide 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;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements; and
- exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not previously approved.

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 stock price may be more volatile.

We will remain an emerging growth company until the earliest to occur of: (1) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (2) the date we qualify as a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates; (3) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period; and (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We intend to take advantage of the extended

transition period for adopting new or revised accounting standards under the JOBS Act as an emerging growth company. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates.

The requirements of being a public company may strain our resources, result in more litigation and divert management's attention.

As a public company, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act the listing requirements of The Nasdaq Stock Market LLC and other applicable securities rules and regulations. Complying with these rules and regulations has increased and will increase our legal and financial compliance costs, make some activities more difficult, time consuming or costly and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are required to disclose changes made in our internal control and procedures on a quarterly basis. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could significantly harm our business, financial condition, results of operations and prospects. We may also need to hire additional employees or engage outside consultants to comply with these requirements, which will increase our costs and expenses.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business, financial condition, results of operations and prospects may be significantly harmed.

These rules and regulations may make it more expensive for us to obtain director and officer liability insurance and, in the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

By disclosing information in this prospectus and in future filings required of a public company, our business and financial condition will become more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If those claims are successful, our business could be seriously harmed. Even if the claims do not result in litigation or are resolved in our favor, the time and resources needed to resolve them could divert our management's resources and seriously harm our business, financial condition, results of operations and prospects.

We have identified material weaknesses in our internal control over financial reporting. If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations, which may significantly harm our business.

As a public company, we will be required to maintain internal control over financial reporting and to report any material weaknesses in such internal control. Section 404 of the Sarbanes-Oxley Act requires that we evaluate and

determine the effectiveness of our internal control over financial reporting. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis.

To date, we have had limited financial and accounting personnel to fully execute our accounting processes and address our internal control over financial reporting. During 2020, in connection with the preparation of our financial statements as of and for the years ended December 31, 2019 and 2018, we identified material weaknesses in our control over financial reporting.

First, we did not design and therefore did not have an effective control environment commensurate with our financial reporting requirements. Specifically, we lacked a sufficient number of professionals with an appropriate level of accounting knowledge, training and experience to appropriately analyze, record and disclose accounting matters timely and accurately. This material weakness contributed to an additional material weakness in that we did not design and therefore did not have formal accounting policies, procedures and controls to achieve complete, accurate and timely financial accounting, reporting and disclosures, including controls over the preparation and review of account reconciliations and journal entries.

While these materials weaknesses did not result in a misstatement for the years ended December 31, 2019 and 2018, each of the above material weaknesses could have resulted in a misstatement of the aforementioned account balances or disclosures that would have resulted in a material misstatement to the annual or interim financial statements that would not be prevented or detected.

Since June 2020 and in order to remediate the material weakness in our internal control over financial reporting and address the material weakness in our accounting processes, we have been establishing, and continue to establish, more robust accounting policies and procedures, reviews on the adoption of new accounting positions and the need for financial statement disclosures, and selection and engagement of consultants to assist us in determining positions and evaluating new accounting policies.

We began implementing and we plan to continue to implement the following steps to address the internal control deficiencies that contributed to the material weaknesses, including the following:

- hiring of additional finance and accounting personnel with prior experience working for finance departments of public companies and technical accounting experience, supplemented by third-party resources;
- documenting and formally assessing our accounting and financial reporting policies and procedures; and
- assessing significant accounting transactions and other technical accounting and financial reporting issues, preparing accounting memoranda addressing these issues and maintaining these memoranda in our corporate records.

While we believe that these efforts will improve our internal control over financial reporting, the implementation of these measures is ongoing and will require validation and testing of the design and operating effectiveness of internal controls over a sustained period of financial reporting cycles. We cannot reasonably estimate when these remediation measures will be completed nor can we assure you that the measures we have taken to date, and are continuing to implement, will be sufficient to remediate the material weaknesses we have identified or avoid potential future material weaknesses. If the steps we take do not correct the material weaknesses in a timely manner, we will be unable to conclude that we maintain effective internal controls over financial reporting. Furthermore, we may not have identified all material weaknesses, and our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Accordingly, there continues to be a reasonable possibility that these deficiencies or others could result in a misstatement of our accounts or disclosures that would result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis.

If we continue to fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement

required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an emerging growth company, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We could be an emerging growth company for up to five years. An independent assessment of the effectiveness of our internal controls over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls over financial reporting could lead to restatements of our financial statements and require us to incur the expense of remediation.

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent our existing stockholders who are our affiliates and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

Our management team has broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the net proceeds from this offering in ways with which investors disagree.

We intend to use a portion of the net proceeds from this offering to advance and expand our clinical and nonclinical development programs and for working capital and for other general corporate purposes, which may include the hiring of additional personnel, capital expenditures and the costs of operating as a public company. See the section titled "Use of Proceeds." However, within the scope of our plan, and in light of the various risks to our business, including those discussed in this "Risk Factors" section and elsewhere in this prospectus, our management will have broad discretion over the use of net proceeds from this offering, and could spend the net proceeds in ways our stockholders may not agree with or that do not yield a favorable return, if at all. If we do not invest or apply the net proceeds from this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock may be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation and shareholder derivative actions. We may be the target of these types of litigation and claims in the future. These claims and litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business, financial condition, results of operations and prospects.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation of the value of our common stock.

We have never declared or paid any cash dividends on our equity securities. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to any appreciation in the value of our common stock, which is not certain.

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

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.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could 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 our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that not all members of the board are elected at one time;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- prohibit our stockholders from calling a special meeting of our stockholders;
- prohibit cumulative voting;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a stockholder rights plan, or so-called “poison pill,” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 66 ²/₃% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our amended and restated certificate of incorporations or amended and restated bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits a person who owns 15% or more 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 15% or more of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions could discourage potential acquisition proposals and could

delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States will be the exclusive forums for substantially all disputes between us and 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 certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of fiduciary duty;
- any action asserting a claim against us arising under the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine or otherwise related to our internal affairs.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation further provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. 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. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions

This exclusive-forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business, financial condition, results of operations and prospects.

Special note regarding forward-looking statements

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned nonclinical studies and clinical trials, results of nonclinical studies, clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- our financial performance;
- the sufficiency of our existing cash to fund our future operating expenses and capital expenditure requirements;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- the scope, progress, results and costs of developing OP-1250 or any other product candidates we may develop, and conducting nonclinical studies and clinical trials, including our OP-1250 Phase 1/2 clinical trial;
- the timing and costs involved in obtaining and maintaining regulatory approval of OP-1250 or any other product candidates we may develop, and the timing or likelihood of regulatory filings and approvals, including our expectation to seek special designations for our product candidates for various diseases;
- our plans relating to commercializing OP-1250 and any other product candidates we may develop, if approved, including the geographic areas of focus and our ability to grow a sales team;
- the impact of the COVID-19 pandemic on our business and operations, including enrollment in our clinical trial;
- the implementation of our strategic plans for our business and OP-1250 or any other product candidates we may develop;
- the size of the market opportunity for OP-1250 or any other product candidates we may develop in each of the diseases we target;
- our reliance on third parties to conduct nonclinical research activities, and for the manufacture of OP-1250 and any other product candidates we may develop;
- the beneficial characteristics, safety, efficacy and therapeutic effects of OP-1250 and any other product candidates we may develop;
- our estimates of the number of patients in the United States who suffer from the diseases we target and the number of subjects that will enroll in our clinical trials;
- the progress and focus of our current and future clinical trials, and the reporting of data from those trials;
- our ability to advance product candidates into and successfully complete clinical trials;
- the ability of our clinical trials to demonstrate the safety and efficacy of OP-1250 and any other product candidates we may develop, and other positive results;
- the success of competing therapies that are or may become available;
- developments relating to our competitors and our industry, including competing product candidates and therapies;

- our plans relating to the further development and manufacturing of OP-1250 and any other product candidates we may develop, including additional indications that we may pursue;
- existing regulations and regulatory developments in the United States and other jurisdictions;
- our potential and ability to successfully manufacture and supply OP-1250 and any other product candidates we may develop for clinical trials and for commercial use, if approved;
- the rate and degree of market acceptance of OP-1250 and any other product candidates we may develop, as well as the pricing and reimbursement of OP-1250 and any other product candidates we may develop, if approved;
- our continued reliance on third parties to conduct additional clinical trials of OP-1250 and any other product candidates we may develop, and for the manufacture of our product candidates;
- our plans and ability to obtain and protect intellectual property rights;
- the scope of protection we are able to establish and maintain for intellectual property rights, including OP-1250 and any other product candidates we may develop;
- our ability to retain the continued service of our key personnel and to identify, hire, and then retain additional qualified personnel;
- our expectations regarding the impact of the COVID-19 pandemic on our business and operations, including clinical trials, manufacturing suppliers, collaborators, use of CROs and employees;
- our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act; and
- our anticipated use of our existing cash and cash equivalents and the proceeds from this offering.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that "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.

Market, industry and other data

We obtained the industry, market and competitive position data used throughout this prospectus from our own internal estimates and research, as well as from independent market research, industry and general publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires. In addition, while we believe the industry, market and competitive position data included in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us.

Use of proceeds

We estimate that we will receive net proceeds from this offering of approximately \$ million (or approximately \$ million if the underwriters' option to purchase additional shares of our common stock is exercised in full) based on the assumed initial public offering price of \$ per share, after deducting 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 \$ per share would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$ 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 underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$ million, assuming the initial public offering price of \$ per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations, establish a public market for our common stock and facilitate our future access to the public capital markets.

As of September 30, 2020, we had cash and cash equivalents of \$127.8 million. We intend to use the net proceeds we receive from this offering together with our existing cash and cash equivalents, as follows:

- approximately \$ to complete our ongoing Phase 1/2 monotherapy clinical trial;
- approximately \$ to advance OP-1250 through our planned Phase 1b combination trials with CDK4/6i and PI3K α ; and
- the remainder for other ongoing research and development activities, and for general corporate purposes, including working capital, operating expenses and capital expenditures.

We may also use a portion of the remaining net proceeds and our existing cash and cash equivalents to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so.

We believe, based on our current operating plan, that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our operations for at least the next 24 months. In particular, we expect that the net proceeds from this offering will allow us to complete our ongoing Phase 1/2 dose escalation and expansion clinical trial of OP-1250 for the treatment of recurrent, locally advanced or metastatic ER+, human epidermal growth factor receptor 2-negative, or HER2-, breast cancer and begin to study OP-1250 in combination with other targeted breast cancer therapies. However, our expected use of proceeds from this offering described above represents our current intentions based on our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds to be received upon the closing of this offering or the actual amounts that we will spend on the uses set forth above. The net proceeds from this offering, together with our cash and cash equivalents, will not be sufficient for us to fund OP-1250 through regulatory approval, and we will need to raise additional capital to complete the development and commercialization of OP-1250 and any future product candidates we may develop.

The amounts and timing of our actual expenditures will depend on numerous factors, including the time and cost necessary to conduct our planned clinical trials, the results of our planned clinical trials and other factors described in the section titled "Risk Factors" in this prospectus, as well as the amount of cash used in our operations and any unforeseen cash needs. Therefore, our actual expenditures may differ materially from the estimates described above. We may find it necessary or advisable to use the net proceeds for other purposes. We will have broad discretion over how to use the net proceeds to us from this offering. We intend to invest the net proceeds to us from the offering that are not used as described above in short-term, investment-grade, interest-bearing instruments.

Dividend policy

We do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our capital stock. We intend to retain all available funds and future earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends 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 and cash equivalents and capitalization as of September 30, 2020:

- on an actual basis;
- on a pro forma basis, giving effect to the (i) automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 66,257,144 shares of our common stock which will occur upon the closing of this offering, and the related reclassification of the carrying value of our convertible preferred stock to permanent equity upon the closing of this offering, and (ii) filing and effectiveness of our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering; and
- on a pro forma as adjusted basis, giving effect to the (i) pro forma adjustments set forth above and (ii) our receipt of net proceeds from the sale of shares of common stock in this offering at the assumed initial public offering price of \$ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information below is illustrative only, and our capitalization following the closing 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 this table together with the sections titled "Selected Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Description of Capital Stock" and our financial statements and related notes included elsewhere in this prospectus.

| (in thousands, except share and per share amounts) | As of September 30, 2020 | |
|---|--------------------------|-----------------------------------|
| | Actual | Pro forma as adjusted (unaudited) |
| Cash and cash equivalents | \$127,824 | \$ 127,824 |
| Convertible preferred stock, \$0.0001 par value per share; 66,897,006 shares authorized, 66,257,144 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted | \$148,373 | \$ — |
| Stockholders' equity (deficit): | | |
| Common stock, \$0.0001 par value per share; 88,000,000 shares authorized, 7,971,695 shares issued and outstanding, excluding 2,496,352 shares subject to repurchase, actual; shares authorized, 74,228,839 shares issued and outstanding, excluding 2,496,352 shares subject to repurchase, pro forma; shares authorized, shares issued and outstanding, excluding 2,496,352 shares subject to repurchase, pro forma as adjusted | | 1 7 |
| Additional paid-in capital | | — 148,367 |
| Accumulated deficit | (22,964) | (22,964) |
| Total stockholders' equity (deficit) | (22,963) | 125,410 |
| Total capitalization | 125,410 | 125,410 |

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share would increase (decrease) each of our pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$ 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 underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares common stock offered by us would increase (decrease) each of our pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' equity and total

capitalization by approximately \$ million, assuming the assumed initial public offering price of \$ per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock to be issued and outstanding, pro forma and pro forma as adjusted in the table above is based on 74,228,839 shares of common stock outstanding as of September 30, 2020 (including 66,257,144 shares issuable upon the conversion of all outstanding shares of our convertible preferred stock of September 30, 2020), and excludes:

- 2,496,352 shares of unvested restricted common stock subject to repurchase as of September 30, 2020;
- 6,986,227 shares of our common stock issuable upon the exercise of outstanding stock options as of September 30, 2020, with a weighted-average exercise price of \$1.49 per share;
- shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to September 30, 2020, with a weighted-average exercise price of \$ per share;
- shares of our common stock reserved for future issuance under our 2020 Equity Incentive Plan, or 2020 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2020 Plan and any shares underlying outstanding stock awards granted under our 2014 Stock Plan, or 2014 Plan, that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled “Executive Compensation—Equity Benefit Plans”; and
- shares of our common stock reserved for issuance under our 2020 Employee Stock Purchase Plan, or ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, and any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

Dilution

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

As of September 30, 2020, we had a historical net tangible book (deficit) of \$(24.4) million, or \$(3.07) per share of common stock based on the 7,971,695 shares of common stock outstanding as of such date, excluding 2,496,352 shares subject to repurchase as of such date. Our historical net tangible book value per share represents total tangible assets less our deferred initial public offering costs, liabilities and convertible preferred stock, which is not included within stockholders' deficit, divided by the number of shares of common stock outstanding as of September 30, 2020, excluding 2,496,352 shares subject to repurchase as of such date.

Our pro forma net tangible book value as of September 30, 2020 was \$123.9 million, or \$1.67 per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by 74,228,839 shares of common stock outstanding as of such date, after giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 66,257,144 shares of our common stock and the related reclassification of the carrying value of our convertible preferred stock to permanent equity upon the closing of this offering, and (ii) the filing and effectiveness of our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering.

After giving effect to the sale by us of _____ shares of common stock in this offering at the assumed initial public offering price of \$ _____ per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2020 would have been \$ _____ million, or \$ _____ per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value of \$ _____ per share to investors purchasing common stock in this offering. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share after this offering from the amount of cash paid by an investor for a share of common stock in this offering. The following table illustrates this dilution on a per share basis:

| | |
|---|-----------|
| Assumed initial public offering price per share | \$ |
| Historical net tangible book value per share as of September 30, 2020 | \$ (3.07) |
| Pro forma increase in historical net tangible book value per share attributable to the pro forma transactions described in the preceding paragraphs | 4.74 |
| Pro forma net tangible book value per share as of September 30, 2020 | 1.67 |
| Increase in pro forma as adjusted net tangible book value per share attributable to investors purchasing shares in this offering | _____ |
| Pro forma as adjusted net tangible book value per share after this offering | _____ |
| Dilution in pro forma as adjusted net tangible book value per share to investors purchasing shares in this offering | \$ |

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. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share would increase or decrease, as applicable, our pro forma as adjusted net tangible book value per share after this offering by \$ _____ per share and increase or decrease, as applicable, the dilution to investors purchasing shares in this offering by \$ _____ per share, in each case assuming the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease our pro forma as adjusted net tangible book value by approximately \$ _____ per share and decrease or increase, as applicable, the dilution to investors purchasing shares in this offering by _____.

approximately \$ _____ per share, in each case assuming the assumed initial public offering price of \$ _____ per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, on the pro forma as adjusted basis described above, as of September 30, 2020, the number of shares of common stock purchased from us, the total consideration paid, or to be paid, and the weighted-average price per share paid, or to be paid, by existing stockholders and by investors purchasing shares in this offering at the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

| | Shares Purchased | | Total Consideration ⁽¹⁾ | | Weighted-Average Price Per Share |
|-----------------------|------------------|---------------|------------------------------------|---------------|----------------------------------|
| | Number | Percent | Amount | Percent | |
| Existing stockholders | 76,725,191 | % | \$153,123,673 ⁽¹⁾ | % | \$ 1.99 |
| New public investors | | | | | \$ |
| Total | | 100.0% | \$ | 100.0% | |

(1) Includes non-cash consideration of \$9,067,660.

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 _____ % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by investors purchasing shares of common stock in the offering would be increased to _____ % of the total number of shares outstanding after this offering.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the total consideration paid by investors purchasing shares in this offering by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. Similarly, each increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, the total consideration paid by investors purchasing shares in this offering by approximately \$ _____ million, assuming no change in the assumed initial public offering price.

If the underwriters exercise their option to purchase additional shares of common stock in full, the pro forma net tangible book value per share, as adjusted to give effect to this offering, would be \$ _____ per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be \$ _____ per share.

The foregoing discussion and tables above (other than the historical net tangible book value calculation) are based on 76,725,191 shares of common stock outstanding as of September 30, 2020 (including (i) 66,257,144 shares issuable upon the conversion of all outstanding shares of our convertible preferred stock as of September 30, 2020 and (ii) 2,496,352 shares of unvested restricted common stock subject to repurchase as of such date), and excludes:

- 6,986,227 shares of our common stock issuable upon the exercise of outstanding stock options as of September 30, 2020, with a weighted-average exercise price of \$1.49 per share;
- _____ shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to September 30, 2020, with a weighted-average exercise price of \$ _____ per share;
- _____ shares of our common stock reserved for future issuance under our 2020 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2020 Plan and any shares underlying outstanding stock awards granted under our 2014 Plan that expire or

are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled “Executive Compensation—Equity Benefit Plans”; and

- shares of our common stock reserved for issuance under our ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, and any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

To the extent that any outstanding options are exercised or new options are issued under our stock-based compensation plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

Selected financial data

The following tables set forth our selected financial data for the periods and as of the dates indicated. The following selected statements of operations data for the years ended December 31, 2018 and 2019, and our selected balance sheet data as of December 31, 2018 and 2019, have been derived from our audited financial statements included elsewhere in this prospectus. The following selected statements of operations data for the nine months ended September 30, 2019 and 2020 and the selected balance sheet data as of September 30, 2020 have been derived from our unaudited interim condensed financial statements included elsewhere in this prospectus. The unaudited interim condensed financial statements were prepared on a basis consistent with our audited financial statements and include, in management's opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of the financial information set forth in those statements. Our historical results are not necessarily indicative of the results that may be expected for any period in the future and our interim results are not necessarily indicative of our expected results for the year ending December 31, 2020. You should read the following selected 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 included elsewhere in this prospectus. The selected financial data included in this section are not intended to replace the financial statements and are qualified in their entirety by our financial statements and the related notes included elsewhere in this prospectus.

| (in thousands, except share and per share data) | Year ended December 31, | | Nine months ended September 30, | |
|--|----------------------------|------------|------------------------------------|-------------|
| | 2018 | 2019 | 2019 | 2020 |
| | | | | (unaudited) |
| Operating expenses: | | | | |
| Research and development | \$ 1,693 | \$ 3,920 | \$ 3,010 | \$ 7,415 |
| General and administrative | 386 | 403 | 296 | 3,982 |
| Total operating expenses | 2,079 | 4,323 | 3,306 | 11,397 |
| Loss from operations | (2,079) | (4,323) | (3,306) | (11,397) |
| Other (expense) income: | | | | |
| Interest income | 4 | 7 | 7 | 59 |
| Interest (expense) | (28) | — | — | (653) |
| Other income | — | — | — | 1 |
| Loss on extinguishment of convertible notes | (63) | — | — | — |
| Loss on remeasurement of convertible notes | (31) | — | — | — |
| Total other (expense) income, net | (118) | 7 | 7 | (593) |
| Net loss and comprehensive loss ⁽¹⁾ | (2,197) | (4,316) | (3,299) | (11,990) |
| Repurchase and retirement of Series A and Series A-1 convertible preferred stock | — | — | — | (1,869) |
| Net loss attributable to common stockholders | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (13,859) |
| Net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾ | \$ (0.31) | \$ (0.60) | \$ (0.46) | \$ (1.90) |
| Weighted-average shares used to compute net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾ | 7,032,974 | 7,230,200 | 7,230,200 | 7,297,745 |
| Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽¹⁾ | | \$ (0.21) | | \$ (0.35) |
| Weighted-average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽¹⁾ | | 20,133,714 | | 39,306,921 |

(1) See Note 11 to our financial statements included elsewhere in this prospectus for a description of how we compute basic and diluted net loss per share attributable to common stockholders and pro forma basic and diluted net loss per share attributable to common stockholders.

| (in thousands) | As of December 31, | | As of September 30, |
|------------------------------------|--------------------|-----------------|---------------------|
| | 2018 | 2019 | 2020 (unaudited) |
| Balance Sheet Data: | | | |
| Cash and cash equivalents | \$ 3,149 | \$ 68 | \$ 127,824 |
| Working capital ⁽¹⁾ | 3,041 | (1,275) | 123,814 |
| Total assets | 3,271 | 132 | 130,683 |
| Total liabilities | 201 | 1,378 | 5,273 |
| Convertible preferred stock | 9,348 | 9,348 | 148,373 |
| Accumulated deficit | (6,446) | (10,762) | (22,964) |
| Total stockholders' deficit | (6,278) | (10,594) | (22,963) |

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

Management's discussion and analysis of financial condition and results of operations

The following discussion should be read in conjunction with the section titled "Selected Financial Data" and our financial statements and related notes thereto included elsewhere in this prospectus. In addition to historical information, this discussion contains forward-looking statements that involve risks, uncertainties and assumptions that could cause actual results to differ materially from management's expectations. Factors that could cause such differences are discussed in the sections titled "Special Note Regarding Forward-Looking Statements" and "Risk Factors." We are not undertaking any obligation to update any forward-looking statements or other statements we may make in the following discussion or elsewhere in this document even though these statements may be affected by events or circumstances occurring after the forward-looking statements or other statements were made. Therefore, no reader of this document should rely on these statements being current as of any time other than the time at which this document is declared effective by the SEC.

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of next generation targeted therapies for women's cancers. Our team has spent the past decade characterizing the structure and function of the ER, a key driver of breast cancer in approximately 75% of patients, in order to develop more potent, oral therapies that completely inactivate this signaling pathway. Our wholly-owned, lead product candidate, OP-1250, is a novel oral therapy with combined activity as both a CERAN and a SERD, which we believe will drive deeper, more durable responses than existing therapies. OP-1250, both as a monotherapy and in combination with inhibitors of CDK4/6 demonstrated robust tumor shrinkage in several xenograft models, including a breast cancer brain metastasis model. In August 2020, we initiated an ongoing Phase 1/2 dose escalation and expansion trial evaluating OP-1250 for the treatment of recurrent, locally advanced or metastatic ER+, HER2- breast cancer, and expect to report initial data from this trial in the second half of 2021. We own worldwide development and commercialization rights to OP-1250. As summarized in the figure below, our plan is to develop OP-1250 in a number of ER+ breast cancer indications, both as a monotherapy and in combination with approved targeted therapies that have shown improved outcomes with other endocrine therapies. We believe OP-1250's oral formulation and dual mechanism of action directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and position OP-1250 as a potential endocrine therapy of choice for the treatment of ER+ breast cancers. Our goal is to transform the standard of care for women living with cancers by developing more effective therapies that apply our deep understanding and collective expertise in endocrine-driven cancers, nuclear receptor activities and mechanisms of acquired resistance.

Since our inception, we have devoted substantially all of our resources to organizing and staffing our company, research and development activities, business planning, raising capital, establishing and maintaining our intellectual property portfolio, conducting nonclinical studies and clinical trials and providing general and administrative support for these operations.

We do not have any product candidates approved for commercial sale, and we have not generated any revenue from product sales. Our ability to generate product revenue sufficient to achieve profitability, if ever, will depend on the successful development and eventual commercialization of one or more of our product candidates which we expect, if it ever occurs, will take a number of years. We also do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for nonclinical and clinical testing, as well as for commercial manufacturing if any of our product candidates obtain marketing approval. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment and personnel while also enabling us to focus our expertise and resources on the development of our product candidates.

To date, we have funded our operations primarily through proceeds from the sale of shares of our common stock, convertible preferred stock and convertible promissory notes. As of December 31, 2019, we had \$0.1 million in

cash and cash equivalents. In January 2020, we received proceeds of \$3.0 million from the issuance of convertible promissory notes, or the 2020 Notes. From March 2020 through June 2020, we issued 30,113,990 shares of our Series B convertible preferred stock at a price of \$1.69 per share for cash proceeds of \$50.9 million, and 1,779,502 shares of our Series B convertible preferred stock upon conversion of the 2020 Notes (including accrued interest). In September 2020, we issued 22,036,764 shares of our Series C convertible preferred stock at a price of \$3.96782 per share for cash proceeds of \$87.4 million. Through September 30, 2020, we had received aggregate gross proceeds of \$151.0 million from sales of our common stock, convertible preferred stock and issuance of convertible promissory notes since inception. As of September 30, 2020, we had cash and cash equivalents of \$127.8 million. Based on our current operating plan, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our planned operating expenses and capital expenditure requirements for at least the next 24 months.

We have incurred significant operating losses since the commencement of our operations. Our net losses were \$2.2 million, \$4.3 million and \$12.0 million for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2020, respectively, and we expect to incur significant and increasing losses for the foreseeable future as we continue to advance our product candidate, and as we transition to operating as a public company. Our net losses may fluctuate significantly from period to period, depending on the timing of expenditures on our research and development activities. As of September 30, 2020, we had an accumulated deficit of \$23.0 million. Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures and general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and other current liabilities.

We expect to continue to incur net operating losses for at least the next several years, and we expect our research and development expenses, general and administrative expenses, and capital expenditures will continue to increase. We expect our expenses and capital requirements will increase significantly in connection with our ongoing activities as we:

- continue our ongoing and planned research and development of our lead product candidate OP-1250 for the treatment of ER+ positive breast cancer;
- initiate nonclinical studies and clinical trials for any additional product candidates that we may pursue in the future;
- seek to discover and develop additional product candidates and further expand our clinical product pipeline;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- continue to scale up external manufacturing capacity with the aim of securing sufficient quantities to meet our capacity requirements for clinical trials and potential commercialization;
- establish a sales, marketing and distribution infrastructure to commercialize any approved product candidates and related additional commercial manufacturing costs;
- develop, maintain, expand, protect and enforce our intellectual property portfolio, including patents, trade secrets and know how;
- acquire or in-license other product candidates and technologies;
- attract, hire and retain additional clinical, scientific, quality control, and manufacturing management and administrative personnel;
- add clinical, operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts;
- expand our operations in the United States and to other geographies; and
- incur additional legal, accounting, investor relations and other expenses associated with operating as a public company.

We also expect to increase the size of our administrative function to support the growth of our business. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and our expenditures on other research and development activities.

We will require substantial additional funding to develop our product candidates and support our continuing operations. Until such time that we can generate significant revenue from product sales or other sources, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, which could include income from collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties, or from grants. We may be unable to raise additional funds or to enter into such agreements or arrangements on favorable terms, or at all. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic and otherwise. Our failure to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on our business, results of operations or financial condition, including requiring us to have to delay, reduce or eliminate our product development or future commercialization efforts. Insufficient liquidity may also require us to relinquish rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our development efforts. We cannot provide assurance that we will ever be profitable or generate positive cash flow from operating activities.

The COVID-19 pandemic continues to rapidly evolve. As a result of the COVID-19 pandemic, we experienced some delays in setting up our current Phase 1/2 clinical trial and in clinical site initiation, including delays in recruiting clinical site investigators and clinical site staff, which we may experience again in the future. The extent of the impact of the COVID-19 pandemic on our business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on our development activities, planned clinical trial enrollment, future trial sites, CROs, third-party manufacturers, and other third parties with whom we do business, as well as its impact on regulatory authorities and our key scientific and management personnel. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. To the extent possible, we are conducting business as usual, with necessary or advisable modifications to employee travel and with our employees working remotely. We will continue to actively monitor the rapidly evolving situation related to the COVID-19 pandemic and may take further actions that alter our operations, including those that may be required by federal, state or local authorities, or that we determine are in the best interests of our employees and other third parties with whom we do business. At this point, the extent to which the COVID-19 pandemic may affect our business, operations and development timelines and plans, including the resulting impact on our expenditures and capital needs, remains uncertain.

Components of our results of operations

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from the sale of products for the foreseeable future.

Operating expenses

Research and development

Research and development expenses account for a significant portion of our operating expenses and consist primarily of external and internal expenses incurred in connection with the discovery and development of our product candidates. To date, our research and development expenses have related primarily to discovery efforts and nonclinical and clinical development of our product candidate OP-1250. Research and development expenses are recognized as incurred and payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received.

External expenses include:

- expenses incurred in connection with the discovery and nonclinical development of our product candidates, including under agreements with third parties, such as consultants and CROs;
- the cost of manufacturing products for use in our nonclinical studies and clinical trials, including payments to CMOs and consultants;
- the costs of funding research performed by third parties;
- costs of purchasing lab supplies and non-capital equipment used in designing, developing and manufacturing nonclinical study and clinical trial materials;
- costs associated with consultants for chemistry, manufacturing and controls development, regulatory, statistics and other services;
- expenses related to regulatory activities, including filing fees paid to regulatory agencies; and
- facility costs including rent, depreciation and maintenance expenses.

Internal expenses include employee and personnel-related costs and expenses, including salaries, benefits and stock-based compensation expense for employees and personnel engaged in research and development functions.

We expense research and development expenses in the periods in which they are incurred. Costs for certain activities, such as manufacturing and nonclinical studies and clinical trials, are generally recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and collaborators.

We typically use our employee, consultant and infrastructure resources across our development programs. We track outsourced development costs by product candidate or nonclinical program, but we do not allocate personnel costs, other internal costs or external consultant costs to specific product candidates or nonclinical programs.

Research and development expenses to advance the development of our product candidate and nonclinical program were \$1.7 million and \$3.9 million for the years ended December 31, 2018 and 2019, respectively, and \$3.0 million and \$7.4 million for the nine months ended September 30, 2019 and 2020, respectively.

We expect our research and development expenses to increase substantially in absolute dollars for the foreseeable future as we advance OP-1250 or any other future product candidates we may develop into and through nonclinical studies and clinical trials and pursue regulatory approval of our product candidates. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming. The actual probability of success for OP-1250 or any other future product candidates we may develop may be affected by a variety of factors including: the safety and efficacy of our product candidates, early clinical data, investment in our clinical program, the ability of collaborators to successfully develop our licensed product candidates, competition, manufacturing capability and commercial viability. We may never succeed in achieving regulatory approval for our product candidates. As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our OP-1250 or any other future product candidates we may develop. Clinical and nonclinical development timelines, the probability of success and development costs can differ materially from expectations. We anticipate that we will make determinations as to which product candidates to pursue and how much funding to direct to each product candidate on an ongoing basis in response to the results of ongoing and future nonclinical studies and clinical trials, regulatory developments and our ongoing assessments as to each product candidate's commercial potential. In addition, we cannot forecast whether OP-1250 or any other future product candidates we may develop may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements. We are also unable to predict when, if ever, we will generate revenue from our product candidates to offset these expenses. Our expenditures on current and future nonclinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion. The

duration, costs and timing of nonclinical studies and clinical trials and development of our product candidates will depend on a variety of factors, including:

- the timing and progress of nonclinical and clinical development activities;
- the number and scope of nonclinical 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 investigational new drug-enabling toxicology studies;
- successful patient enrollment in, and the initiation and completion of, clinical trials;
- the successful completion of clinical trials with safety, tolerability and efficacy profiles that are satisfactory to the FDA or any comparable foreign regulatory authority;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- receipt of regulatory approvals from applicable regulatory authorities;
- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities;
- our ability to establish licensing or collaboration arrangements;
- the performance of our future collaborators, if any;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- development and timely delivery of commercial-grade product formulations that can be used in our planned clinical trials and for commercial launch;
- commercializing the product candidate, if approved, whether alone or in collaboration with others;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidate;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- maintaining a continued acceptable safety profiles of our products following approval; and
- obtaining and retaining key research and development personnel.

Any changes in the outcome of any of these factors could significantly impact the costs, timing and viability associated with the development of our product candidates.

General and administrative

General and administrative expenses consist primarily of personnel expenses, including salaries, benefits and stock-based compensation expense, for personnel in executive, finance, accounting, business development, legal, human resource and administrative functions. General and administrative expenses also include corporate facility costs not otherwise included in research and development expenses, depreciation and other expenses, which include direct or allocated expenses for rent and maintenance of facilities and insurance, not otherwise included in research and development expenses, as well as professional fees for legal, patent and consulting services.

We expect that our general and administrative expenses will increase substantially in the foreseeable future as we increase our headcount to support the continued research and development of our programs and the growth of our business. We also anticipate incurring additional expenses associated with operating as a public company, including increased expenses related to audit, legal, regulatory, compliance, director and officer insurance, investor and public relations and tax-related services associated with maintaining compliance with the rules and regulations of the SEC and standards applicable to companies listed on a national securities exchange, additional insurance expenses, investor relations activities and other administrative and professional services.

Total other income (expense), net*Interest income, interest expense and other income*

Interest income and interest expense primarily consists of interest income on our cash and cash equivalents. Interest expense primarily consists of interest on our convertible promissory notes, and in the nine months ended September 30, 2020, a non-cash interest charge related to a beneficial conversion feature on a convertible note issued in January 2020. Other income consists of miscellaneous income not related to operating activities.

Loss on extinguishment of convertible notes

Loss on extinguishment of convertible promissory notes consists of the loss recognized from the extinguishment of the unpaid principal and accrued interest on convertible promissory notes issued in 2017. These notes were extinguished in July 2018 and noteholders were issued Series A-1 convertible preferred stock and common stock concurrent with the extinguishment of the notes.

Loss on remeasurement of convertible notes

Loss on remeasurement of convertible promissory notes consists of the loss recognized from the remeasurement of convertible promissory notes issued in 2018. In July 2018, these notes were remeasured to their final fair value, and then settled with the issuance of Series A-1 convertible preferred stock and common stock provided to noteholders.

Results of operations**Comparison of the nine months ended September 30, 2019 and 2020 (unaudited)**

The following table summarizes our results of operations for the nine months ended September 30, 2019 and 2020:

| | Nine Months Ended September 30, | | |
|-----------------------------------|------------------------------------|------------|-----------|
| | 2019 | 2020 | Change |
| | (unaudited) | | |
| | (in thousands) | | |
| Operating expenses: | | | |
| Research and development | \$ 3,010 | \$ 7,415 | \$ 4,405 |
| General and administrative | 296 | 3,982 | 3,686 |
| Total operating expenses | 3,306 | 11,397 | 8,091 |
| Loss from operations | (3,306) | (11,397) | (8,091) |
| Other (expense) income: | | | |
| Interest income | 7 | 59 | 52 |
| Interest expense | — | (653) | (653) |
| Other income | — | 1 | 1 |
| Total other (expense) income, net | 7 | (593) | (600) |
| Net loss and comprehensive loss | \$(3,299) | \$(11,990) | \$(8,691) |

Research and development expenses

Research and development expenses for the nine months ended September 30, 2019 were \$3.0 million, compared to \$7.4 million for the nine months ended September 30, 2020. The increase of \$4.4 million was primarily due to increased spending for nonclinical research of OP-1250, including the hiring of new employees and increased spending with external vendors on research and development services.

General and administrative expenses

General and administrative expenses for the nine months ended September 30, 2019 were \$0.3 million compared to \$4.0 million for the nine months ended September 30, 2020. The increase of \$3.7 million was primarily due to increased salary expense associated with the expanded executive team and fees paid to outside consultants in connection with our preparation to operate as a public company.

Other (expense) income, net

Other (expense) income, net for the nine months ended September 30, 2019 was insignificant, compared to \$(0.6) million during the nine months ended September 30, 2020. The change was primarily due to the \$(0.7) million of interest expense incurred in the nine months ended September 30, 2020. The interest expense primarily consisted of a non-cash interest charge incurred in connection with convertible notes issued in January 2020.

Comparison of the years ended December 31, 2018 and 2019

The following table summarizes our results of operations for the years ended December 31, 2018 and 2019:

| | Years ended December 31, | | |
|---|-----------------------------|-----------|-----------|
| | 2018 | 2019 | Change |
| | (in thousands) | | |
| Operating expenses: | | | |
| Research and development | \$ 1,693 | \$ 3,920 | \$ 2,227 |
| General and administrative | 386 | 403 | 17 |
| Total operating expenses | 2,079 | 4,323 | 2,244 |
| Loss from operations | (2,079) | (4,323) | (2,244) |
| Other (expense) income: | | | |
| Interest income | 4 | 7 | 3 |
| Interest expense | (28) | — | 28 |
| Loss on extinguishment of convertible notes | (63) | — | 63 |
| Loss on remeasurement of convertible notes | (31) | — | 31 |
| Total other (expense) income, net | (118) | 7 | 125 |
| Net loss and comprehensive loss | \$(2,197) | \$(4,316) | \$(2,119) |

Research and development expenses

Research and development expenses for the year ended December 31, 2018 were \$1.7 million, compared to \$3.9 million for the year ended December 31, 2019. The increase of \$2.2 million was primarily due to the nonclinical research of OP-1250 and included a \$0.7 million increase in lab services costs and \$1.5 million increase in third-party research and development fees.

General and administrative expenses

General and administrative expenses remained relatively unchanged year over year and were \$0.4 million for the years ended December 31, 2018 and 2019, respectively.

Other (expense) income, net

Other (expense) income, net for the year ended December 31, 2018 was less than \$(0.1) million, compared to less than \$0.1 million during the year ended December 31, 2019. The change was primarily due to the \$0.1 million loss on extinguishment and remeasurement of convertible promissory notes in 2018.

Liquidity and capital resources

Sources of liquidity

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from our operations. Our net losses were \$2.2 million and \$4.3 million for the years ended December 31, 2018 and 2019, respectively and \$3.3 million and \$12.0 million for the nine months ended September 30, 2019 and 2020, respectively. As of September 30, 2020, we had \$127.8 million in cash and cash equivalents and an accumulated deficit of \$23.0 million. We had no debt outstanding as of September 30, 2020. To date, we have funded our operations primarily through proceeds from the sale of shares of our common stock, convertible preferred stock and convertible promissory notes. In January 2020, we received proceeds of \$3.0 million from the issuance of convertible promissory notes, or the 2020 Notes. From March 2020 through June 2020, we issued 30,113,990 shares of our Series B convertible preferred stock at a price of \$1.69 per share for cash proceeds of \$50.9 million, and 1,779,502 shares of our Series B convertible preferred stock upon conversion of the 2020 Notes (including accrued interest). In September 2020, we issued 22,036,764 shares of our Series C convertible preferred stock at a price of \$3.96782 per share for gross proceeds of \$87.4 million. Through September 30, 2020, we had received aggregate gross proceeds of \$151.0 million from sales of our common stock, convertible preferred stock and issuance of convertible promissory notes since inception.

We expect to incur significant expenses and operating losses for the foreseeable future as we advance the nonclinical and clinical development of OP-1250. We expect that our research and development and general and administrative costs will increase in connection with conducting additional nonclinical studies and clinical trials for our current and future research programs and product candidates, contracting with CMOs to support nonclinical studies and clinical trials, expanding our intellectual property portfolio, and providing general and administrative support for our operations. As a result, we will need additional capital to fund our operations, which we may obtain from additional equity or debt financings, collaborations, licensing arrangements or other sources.

Our primary uses of cash are to fund our research and development activities, including with respect to OP-1250 and other nonclinical programs, business planning, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital and providing general and administrative support for these operations.

Other than our operating lease obligations, we currently have no financing commitments, such as lines of credit or guarantees, that are expected to affect our liquidity over the next five years.

Future funding requirements

To date, we have not generated any revenue from product sales. We do not expect to generate any meaningful revenue unless and until we obtain regulatory approval of and commercialize any of our product candidates, and we do not know when, or if at all, that will occur. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, continue or initiate clinical trials of, and seek marketing approval for, our product candidate. In addition, if we obtain marketing approval for our product candidate, we expect to incur significant commercialization expenses related to program sales, marketing, manufacturing and distribution to the extent that such sales, marketing and distribution are not the responsibility of potential collaborators. Furthermore, following the closing 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 attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We expect our existing cash, together with the net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 24 months. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of product discovery, nonclinical studies and clinical trials;

- the scope, prioritization and number of our research and development programs;
- the costs, timing and outcome of regulatory review of our product candidate;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any collaboration agreements we enter into;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under collaboration agreements, if any;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other product candidates and technologies;
- the costs of securing manufacturing arrangements for commercial production; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our product candidates.

Identifying potential product candidates and conducting nonclinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes many years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidate, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of a product candidate 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.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. 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 shareholder. 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 or declaring dividends.

If we raise funds through 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 or to grant licenses on terms that may not be favorable to us. 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.

Cash flows

The following table shows a summary of our cash flows for each of the periods presented:

| (in thousands) | Nine Months Ended | | | |
|--|---------------------------------|------------|----------------------|-----------------------|
| | Year Ended December 31, 2018 | 2019 | 2019 | September 30, 2020 |
| | | | | (unaudited) |
| Net cash used in operating activities | \$ (2,176) | \$ (3,081) | \$(2,233) | \$ (10,853) |
| Net cash used in investing activities | — | — | — | (5) |
| Net cash provided by financing activities | 5,254 | — | — | 138,614 |
| Net increase (decrease) in cash and cash equivalents | \$ 3,078 | \$ (3,081) | \$(2,233) | \$127,756 |

Operating activities

Net cash used in operating activities during the year ended December 31, 2018 consisted primarily of our net loss of \$2.2 million. The net loss consisted of \$1.7 million of research and development expenses, \$0.4 million of general and administrative expenses and \$(0.1) million of other (expenses) income, net.

Net cash used in operating activities during the year ended December 31, 2019 consisted primarily of our net loss of \$4.3 million, partially offset by an increase in accounts payable of \$1.2 million. The net loss primarily consisted of \$3.9 million in research and development expenses and \$0.4 million in general and administrative expenses. The increase in accounts payable and other current liabilities was due to the timing of the posting of the invoices and the overall increase in research and development expenses in the year ended 2019.

Net cash used in operating activities during the nine months ended September 30, 2019 consisted primarily of our net loss of \$3.3 million, partially offset by an increase in accounts payable and other current liabilities of \$1.0 million. The net loss consisted primarily of \$3.0 million in research and development expenses and \$0.3 million in general and administrative expenses. The increase in accounts payable and other current liabilities was due to the timing of the posting of the invoices and the overall increase in research and development expenses in the nine months ended September 30, 2019.

Net cash used in operating activities during the nine months ended September 30, 2020 consisted primarily of our net loss of \$12.0 million and cash used in changes in operating assets and liabilities of \$0.2 million, partially offset by net non-cash charges of \$1.4 million. The changes in operating assets and liabilities consisted primarily of an increase in prepaid expenses and other current assets of \$1.3 million and an increase of accounts payable and other current liabilities of \$1.1 million. The increase in prepaid expenses and other current assets was driven by an increase in prepaid clinical trial costs. The increase in accounts payable and other liabilities was driven by an increase in costs related to research and development and professional costs incurred in preparation for our planned initial public offering. The non-cash charges primarily consisted of stock compensation of \$0.7 million and non-cash interest expense of \$0.6 million. The net loss consisted primarily of \$7.4 million in research and development expenses and \$4.0 million in general and administrative expenses.

Investing Activities

Net cash used in investing activities during the nine months ended September 30, 2020 consisted of nominal purchases of equipment. There were no cash flows from investing activities during the nine months ended September 30, 2019 and years ended December 31, 2019 and 2018.

Financing activities

Net cash provided by financing activities during the year ended December 31, 2018 consisted primarily of \$4.9 million in proceeds from the sale and issuance of our Series A-1 convertible preferred stock and \$0.3 million in proceeds from the sale and issuance of our convertible promissory notes, net of issuance costs.

There were no cash flows from financing activities during the nine months ended September 30, 2019 or year ended December 31, 2019.

Net cash provided by financing activities during the nine months ended September 30, 2020 consisted primarily of \$3.0 million in proceeds from the sale and issuance of our convertible promissory notes, \$50.6 million in net proceeds from the sale and issuance of our Series B convertible preferred stock, \$87.4 million in net proceeds from the sale and issuance of our Series C convertible preferred stock, \$0.6 million of proceeds from the exercise of employee stock options and \$0.1 million proceeds from the settlement of non-recourse notes, net of issuance costs. These cash inflows were partially offset by cash outflows of \$2.3 million for the repurchase of Series A convertible preferred stock and Series A-1 convertible preferred stock and \$0.9 million in payments of offering costs associated with our planned initial public offering.

Contractual obligations and commitments

The following table summarizes our contractual obligations and commitments as of September 30, 2020:

| (in thousands) | Payments due by period | | | | |
|------------------|------------------------|--------------|--------------|-------------------|---------|
| | Less than 1 year | 1 to 3 years | 3 to 5 years | More than 5 years | Total |
| Operating leases | \$ 2,699 | \$ 264 | \$— | \$— | \$2,963 |

We enter into contracts in the normal course of business with CROs for clinical trials, nonclinical studies, manufacturing and other services and products for operating purposes. These contracts generally provide for termination upon notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Internal control over financial reporting

In the preparation of our financial statements to meet the requirements of this offering, we determined material weaknesses in our internal control over financial reporting existed during 2019 and remained unremediated as of September 30, 2020. See the section titled “Risk Factors—We have identified material weaknesses in our internal control over financial reporting. Although we have already taken a number of steps to remediate, If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.”

Off-balance sheet arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical accounting policies and significant judgements and estimates

Our management’s discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of our financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, expenses and the disclosure of our contingent liabilities in our financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our financial statements elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our audited financial statements.

Stock-Based Compensation

All stock-based compensation cost, including grants of stock options and restricted stock awards issued under our equity incentive plan, is measured at the grant date based on the fair value of the award and is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. We recognize stock-based compensation in accordance with ASC 718, Compensation—Stock Compensation, or ASC 718. ASC 718 requires the recognition of compensation expense, using a fair-value-based method, for costs related to all share-based payments including stock options. ASC 718 requires companies to estimate the fair value of share-based payment awards on the date of grant. Our determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model. We estimate the expected

option lives using historical data, volatility using stock prices of peer companies, risk-free rates using the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equal to the expected term, and dividend yield using our expectations and historical data. We use the simplified method to calculate the expected term of employee stock option grants. Under the simplified method, the expected term is estimated to be the mid-point between the vesting date and the contractual term of the option. For awards with graded vesting, in which specified tranches of the options vest on different dates, we use a single weighted-average expected life to value the entire award, which is equal to the average of the weighted-average vesting period of the award and the contractual term of the award. The fair value of each stock option grant is calculated based upon our common stock valuation on the date of the grant. Equity instruments issued to nonemployees are recorded at their fair value on the grant date and without subsequent remeasurement. The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest, including awards with graded vesting. As part of the requirements of ASC 718, we have elected to account for forfeitures of stock option grants as they occur.

Fair value of common stock

Historically, for all periods prior to this offering, the fair value of our common stock was estimated on each grant date by our board of directors. In order to determine the fair value, our board of directors considered, among other things, contemporaneous valuations of our common stock and preferred stock prepared by unrelated third-party valuation firms in accordance with the guidance provided by the American Institute of Certified Public Accountants 2013 Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, or the Practice Aid.

Given the absence of a public trading market of our shares of capital 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 shares of common stock and preferred stock, including:

- the prices at which we sold shares of convertible preferred stock and the superior rights and preferences of the convertible preferred stock relative to its common stock;
- the progress of our research and development programs, including the status and results of nonclinical studies for its product candidates;
- our stage of development and commercialization and our business strategy;
- external market conditions affecting the biotechnology industry and trends within the biotechnology industry;
- our financial position, including cash on hand, and its historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and convertible preferred stock;
- the likelihood of achieving a liquidity event, such as an initial public offering, or IPO, or sale of our company in light of prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the biotechnology industry.

Significant changes to the key assumptions underlying the factors used could have resulted in different fair values of common stock at each valuation date.

Common stock valuation methodology

Our contemporaneous common stock valuations were prepared in accordance with the guidelines in the Practice Aid, which prescribes several valuation approaches for determining the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its capital structure and specifically the common stock.

In determining the fair value of our common stock through December 31, 2018, we estimated the equity value of our business using income and market approaches including recent sales of our convertible preferred stock in

arms'-length transactions (the back-solve method). Once an equity value was determined, we utilized the Option-pricing method, or OPM, to allocate the overall value of equity to the various share classes. In accordance with the Practice Aid, the OPM 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 OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value if the funds available for distribution to stockholders exceed the value of the liquidation preferences at the time of a liquidity event, such as a strategic sale or merger. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value rather than, as in the case of a regular option, a comparison with a per share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock liquidation preference is paid. The OPM uses the Black-Scholes option pricing model to price the call options. This model defines the fair value of securities as functions of the current fair value of a company and uses assumptions such as the anticipated timing of a potential liquidity event and the estimated volatility of the equity securities.

In determining the fair value of our common stock beginning May 2020, we estimated the equity value of our business using the Hybrid Method, which utilizes the Probability-Weighted Expected Return Method, or PWERM, a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for us assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. A discount for lack of marketability is then applied to the common stock to account for the lack of access to an active public market. The Hybrid Method is a PWERM where the equity value in one of the scenarios is calculated using an OPM. In the Hybrid Method used by us, we considered three types of future-event scenarios: an initial public offering, an unspecified liquidity event and a scenario where we remain a private company. The equity value for the initial public offering scenario was determined using the guideline public company method, or GPC, which includes comparisons to publicly-traded companies in our industry that recently completed initial public offerings. The equity value for the unspecified liquidity event scenario was determined using a back-solve method. The relative probability of each type of future-event scenario was determined based on an analysis of market conditions at the time, including then-current initial public offering valuations of similarly situated companies, and our expectations as to the timing and likely prospects of the future-event scenarios. A discount for lack of marketability is then applied to the common stock to account for the lack of access to an active public market. To derive the fair value of the common stock for each scenario using the Hybrid Method, we calculated the proceeds to the common stockholders based on the preferences and priorities of the convertible preferred stock and common stock. We then applied a discount for lack of marketability to the common stock to account for the lack of access to an active public market.

We performed contemporaneous valuations, with the assistance of a third-party valuation specialist, as of December 31, 2018, May 31, 2020, July 31, 2020 and August 31, 2020, which resulted in valuations of our common stock of \$0.26, \$0.74, \$1.58 and \$1.73 per share, respectively. We had initially used an OPM in assessing the fair value of our common stock as of May 31, 2020. For financial reporting purposes in connection with the current initial public offering process, we retrospectively assessed the fair value of our common stock in connection with our June 2020 stock option grants and restricted stock awards using the Hybrid Method. See the column titled "Estimated Fair Value of Common Stock Per Share on Grant Date (utilized for ASC 718 calculation)" in the table below.

Following the closing of this offering, the fair value of our common stock will be determined based on the closing price of the primary stock exchange on which our common stock is traded.

Stock options and restricted stock awards

The following table sets forth by grant date the number of shares subject to stock options granted from January 1, 2019 through September 30, 2020, the per share exercise price of the options, the fair value of common stock per share on each grant date, and the per share estimated fair value of the options:

| Grant Date | Number of Shares Subject to options Granted | Per Share Exercise Price of options | Estimated Fair Value of Common Stock Per Share on Grant Date (utilized for ASC 718 calculation) | Per Share Estimated Fair Value of Options |
|--------------------|---|--|---|---|
| June 10, 2020 | 217,828 | \$ 0.74 | \$ 0.86 | \$ 0.57 |
| June 10, 2020 | 960,572 | \$ 0.74 | \$ 0.86 | \$ 0.58 |
| August 12, 2020 | 854,840 | \$ 1.58 | \$ 1.58 | \$ 1.03 |
| August 12, 2020 | 294,000 | \$ 1.58 | \$ 1.58 | \$ 1.05 |
| August 14, 2020 | 44,000 | \$ 1.58 | \$ 1.58 | \$ 1.06 |
| September 12, 2020 | 635,272 | \$ 1.73 | \$ 1.73 | \$ 1.14 |
| September 18, 2020 | 317,636 | \$ 1.73 | \$ 1.73 | \$ 1.07 |
| September 19, 2020 | 231,212 | \$ 1.73 | \$ 1.73 | \$ 1.14 |
| September 19, 2020 | 3,568,714 | \$ 1.73 | \$ 1.73 | \$ 1.15 |

In June 2020, we granted to certain employees 2,200,000 shares of restricted stock. The restricted stock was issued as consideration for services at a deemed fair value per share of \$0.86, for aggregate consideration of \$1.9 million.

Accrued research and development expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing purchase orders and open contracts, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the services when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include the costs incurred for services performed by CROs and CMOs among others, in connection with research and development activities for which we have not yet been invoiced.

We contract with CROs and CMOs to conduct clinical and manufacturing and other research and development services on our behalf. We base our expenses related to CROs and CMOs on our estimates of the services received and efforts expended pursuant to quotes and contracts with them. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our CROs or CMOs will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or amount of prepaid expense accordingly. Non-refundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates of such expenses and the amounts actually incurred.

Emerging growth company status

The JOBS Act permits an "emerging growth company" such as us to take advantage of an extended transition to comply with new or revised accounting standards applicable to public companies until those standards would

otherwise apply to private companies. We have 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 we are (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition provided in the JOBS act. As a result, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies and our financial statements may not be comparable to 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. The JOBS Act also exempts us from having to provide an auditor attestation of internal control over financial reporting under Sarbanes-Oxley Act Section 404(b).

We will 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 \$1.07 billion or more, (ii) the last day of the fiscal year in which the fifth anniversary of the completion of this initial public offering occurs, (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years or (iv) the last day of the fiscal year in which we are deemed to be a large accelerated filer under the rules of the SEC, which generally is when we have more than \$700.0 million in market value of our stock held by non-affiliates as of the last day of the second fiscal quarter and we have been a public company for at least 12 months and have filed one annual report.

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

Recently issued accounting pronouncements

See note 2 to our financial statements beginning on page F-1 of this prospectus for a description of recent accounting pronouncements applicable to our financial statements.

Qualitative and quantitative 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. As of December 31, 2019 and September 30, 2020, we had cash and cash equivalents of less than \$0.1 million and \$127.8 million, respectively. We generally hold our cash in interest-bearing bank accounts and money market funds. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. An immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash.

Financial institution risk

Substantially all of our cash is held with a single financial institution. Due to its size, this financial institution represents a minimal credit risk. Cash amounts held at financial institutions are insured by the Federal Deposit Insurance Corporation up to \$250,000.

Foreign currency exchange risk

Our expenses are generally denominated in U.S. dollars. To date, we have not had any foreign currency transactions, and we do not have a formal hedging program with respect to foreign currency. A 10.0% increase or decrease in current exchange rates would not have a material effect on our financial results.

Effects of inflation

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation has had a material effect on our results of operations during the periods presented.

Business

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of next generation targeted therapies for women's cancers. Our team has spent the past decade characterizing the structure and function of the estrogen receptor, or ER, a key driver of breast cancer in approximately 75% of patients, in order to develop more potent, oral therapies that completely inactivate this signaling pathway. Our lead product candidate, OP-1250, is a novel oral therapy with combined activity as both a complete ER antagonist, or CERAN, and a selective ER degrader, or SERD, which we believe will drive deeper, more durable responses than existing therapies. OP-1250, both as a monotherapy and in combination with inhibitors of cyclin-dependent kinase 4 and 6, or CDK4/6, demonstrated robust tumor shrinkage in several xenograft models, including a breast cancer brain metastasis model. In August 2020, we initiated an ongoing Phase 1/2 dose escalation and expansion trial evaluating OP-1250 for the treatment of recurrent, locally advanced or metastatic ER-positive, or ER+, human epidermal growth factor receptor 2-negative, or HER2-, breast cancer, and expect to report initial data from this trial in the second half of 2021. We own worldwide development and commercialization rights to OP-1250. We believe OP-1250's oral formulation and dual mechanism of action directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and position OP-1250 as a potential endocrine therapy of choice for the treatment of ER+ breast cancers. Our goal is to transform the standard of care for women living with cancers by developing more effective therapies that apply our deep understanding and collective expertise in endocrine-driven cancers, nuclear receptor activities and mechanisms of acquired resistance.

We are initially focused on developing therapies for the treatment of breast cancer, which represents approximately 30% of all new diagnoses of women's cancer. In 2020, the American Cancer Society, or ACS, estimates there will be approximately 276,000 new cases of female breast cancer and over 42,000 deaths from metastatic breast cancer in the United States. Treatment decisions are based on a combination of individual patient characteristics and tumor biology, most importantly the expression of three proteins: ER, progesterone receptor, or PR, and human epidermal growth factor receptor 2, or HER2. Approximately 75% of all breast cancers are ER+, and approximately 65% are ER+/HER2- highlighting the central role of the ER in driving a large majority of breast cancer. Approximately 6-10% of breast cancer patients present with metastatic disease at diagnosis and a further 20-30% of patients initially diagnosed with early-stage disease ultimately develop metastatic disease. The current five-year survival rate for patients with ER+ metastatic breast cancer is approximately 30%. In 2019, worldwide sales for endocrine and targeted therapies treating ER+ breast cancer patients totaled \$9.6 billion.

The ER is a nuclear receptor that functions as a ligand regulated transcription factor. When bound to estrogen, the ER directs the expression of genes that are essential for breast cancer cells' survival and proliferation. For more than four decades, researchers have been developing new approaches and therapies to prevent activation of the ER pathway, thereby inhibiting the ability of the ER to drive tumor cell growth. In 1977, the first endocrine therapeutic, the anti-estrogen tamoxifen, was approved by the U.S. Food and Drug Administration, or FDA, for the treatment of breast cancer. Tamoxifen is still commonly used today but is challenged by the development of acquired drug resistance, which in some cases may be due to its partial agonist activity. In search for a different mechanism to target the estrogen pathway, aromatase inhibitors, or AIs, were developed in the 1990s to block the synthesis of estrogen and deprive the ER+ cells of its activating ligand. However, up to 50% of patients taking AIs develop arthralgia, leading to suspension of treatment in up to 15% of patients. Additionally, most patients with metastatic breast cancer have been shown to ultimately develop resistance to AIs. These agents are also not used to treat pre-menopausal women without the addition of ovarian suppression.

In 2002, fulvestrant was approved as a treatment for hormone receptor positive, or HR+, metastatic breast cancer patients and is typically used as a second- or third-line endocrine agent. Fulvestrant was designed to be a CERAN, and later discovered to also be a SERD, and represented a breakthrough for the field with improved outcomes for patients whose disease had progressed on prior endocrine therapy. However, fulvestrant has several limitations including its suboptimal drug exposure and route of administration as a monthly intramuscular injection. Despite these drawbacks, fulvestrant achieved worldwide sales of over \$1.1 billion in 2019.

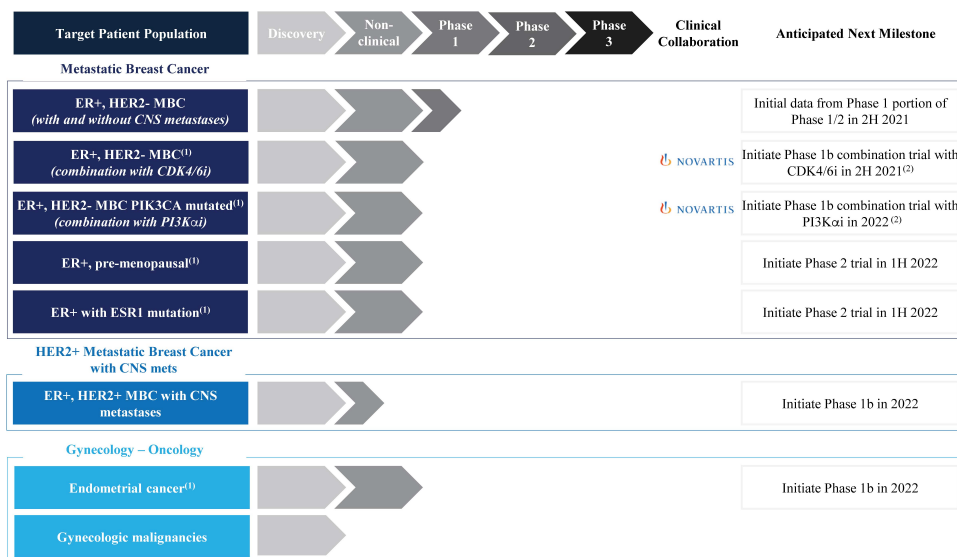
More recently, the field has focused on the discovery and development of oral agents that have fulvestrant's dual mechanism of action to completely inactivate and degrade the ER. Some of these oral SERD agents are CERANs, such as OP-1250, but others have partial agonist activity despite being SERDs and thus are not CERANs. SERDs reduce the levels of the ER but they do not entirely eliminate it. Consequently, SERDs are not necessarily CERANs. Notably, estrogen itself leads to ER degradation.

We designed our lead product candidate, OP-1250, based both on a detailed structural understanding of the ER and on known alterations to this structure induced by fulvestrant and other ligands. We have demonstrated in nonclinical studies that OP-1250 functions both as a CERAN and a SERD, but is distinguished from fulvestrant in several noteworthy ways, including:

- *OP-1250 is orally bioavailable while fulvestrant is a highly insoluble compound that must be administered monthly by intramuscular injection into the buttocks;*
- *OP-1250 has favorable biodistribution properties leading to higher drug concentrations in the plasma and tumor than those achieved with fulvestrant, as shown in a head-to-head mouse xenograft study; and*
- *OP-1250 has demonstrated the ability to shrink tumors in head-to-head nonclinical studies with fulvestrant, in contrast to fulvestrant, which has only been shown to inhibit tumor growth.*

Based on these nonclinical differences, we believe that OP-1250 has the potential to demonstrate clinical outcomes superior to fulvestrant. Furthermore, OP-1250 has the potential to benefit patients with metastatic breast cancer, initially for patients who have previously received endocrine therapy, as well as those who are treatment naïve in the metastatic setting, and advance into the adjuvant setting for early-stage ER+ breast cancer. In multiple nonclinical animal models of anti-cancer activity, including patient-derived xenografts with tumors containing activating mutations in the ER, OP-1250 monotherapy led to tumor shrinkage or in some cases tumor eradication, as well as long-term post-treatment survival. In each of these nonclinical models, the effect of OP-1250 was superior to that of fulvestrant, an effect which we determined was driven both by improved pharmacokinetic, or PK, properties, and higher plasma and tumor drug concentrations. In nonclinical studies, OP-1250 demonstrated robust central nervous system, or CNS, penetration, and in an intracranial breast cancer brain metastases xenograft study, OP-1250 demonstrated the ability to shrink tumors and improve survival in mice. OP-1250 has the potential to address a critical unmet need as 10-15% of ER+ breast cancer patients develop brain metastases for which there are currently limited treatment options.

As summarized in the figure below, our plan is to develop our wholly-owned lead product candidate, OP-1250, in a number of ER+ breast cancer indications, both as a monotherapy and in combination with approved targeted therapies that have shown improved outcomes with other endocrine therapies.



MBC = metastatic breast cancer; PI3K α = phosphatidylinositol 3-kinase alpha; RP2D = recommended Phase 2 dose; CDK4/6i = CDK4/6 inhibitor; PI3Kai = PI3K α inhibitor

⁽¹⁾ Patient population may be studied as additional cohort(s) of current Phase 1/2 clinical trial or may be studied in a separate clinical trial.

⁽²⁾ Anticipated initiation of Phase 1b is after determination of RP2D of current Phase 1/2 trial.

In August 2020, we initiated a Phase 1/2 clinical trial of OP-1250 in patients with recurrent, locally advanced or metastatic ER+/HER2- breast cancer whose disease has progressed on endocrine therapy. Phase 1 consists of monotherapy dose escalation to evaluate the safety and PK of OP-1250 and to determine the maximum tolerated dose, or MTD, and/or the recommended Phase 2 dose, or RP2D. The expansion phase will enroll patients at the RP2D in order to explore preliminary efficacy in selected patient populations. The first cohort of the expansion phase will consist of women and men with recurrent, locally advanced or metastatic breast cancer whose disease has progressed on prior endocrine therapy. A second cohort is exploratory and will enroll individuals with metastatic breast cancer who have brain metastases. As of October 23, 2020, the first dose cohort, consisting of four patients, has completed enrollment and the initial 28 day dose limiting toxicity assessment period, and the second dose cohort is enrolling patients. Preliminary PK data from the first dose cohort is consistent with nonclinical modeling of our Phase 1 starting dose. We expect to report initial data from the Phase 1 portion of the trial in the second half of 2021. In addition, we plan to explore the potential clinical benefit of OP-1250 in combination with other approved agents for breast cancer, such as inhibitors of CDK4/6 and phosphatidylinositol 3-kinase alpha, or PI3K α , which have been shown to lead to improvements in both progression-free and overall survival. In July 2020, we entered into a non-exclusive agreement with Novartis Institutes for BioMedical Research, Inc., or Novartis, to evaluate the combination of OP-1250 and Novartis' ribociclib, a CDK4/6 inhibitor, as well as alpelisib, their PI3K α inhibitor. Under the terms of the collaboration, Novartis will be responsible for funding the majority of the costs for the Phase 1b clinical trial, as well as supplying their drugs.

Our Chief Technology Officer, Cyrus Harmon, Ph.D., and Chief Scientific Officer, Peter Kushner, Ph.D., co-founded the company in 2007 with the goal of discovering and developing therapies to improve the lives of women with cancer. Our management team has significant experience in oncology and in progressing products from early stage research to clinical trials, and ultimately to regulatory approval and commercialization. Together, they bring in-house expertise in medicinal chemistry, biology, translational medicine, computational biology and chemistry, in vitro and in vivo pharmacology, biomarker development and manufacturing. We have also established internal expertise in clinical development, clinical operations, pharmacovigilance, clinical pharmacology, regulatory and quality. Our Chief Executive Officer, Sean Bohlen, M.D., Ph.D., was previously the Executive Vice President, Global Medicines Development and Chief Medical Officer at AstraZeneca. Prior to AstraZeneca, Dr. Bohlen

held various leadership roles during his 13 years at Genentech including Senior Vice President, Early Development. Other members of the management team have held senior level positions at Neomorphic (sold to Affymetrix), Serra Pharmaceuticals (sold to Karo Bio), Genentech, BlueRock Therapeutics (sold to Bayer AG), Intellikine (sold to Takeda), Kosan Biosciences (sold to Bristol-Myers Squibb), PTC Therapeutics, Portola Pharmaceuticals (sold to Alexion), Alexion Pharmaceuticals and Elan Corporation (sold to Perrigo). We are supported by our board of directors, scientific advisory board and a leading syndicate of investors which includes BVF Partners, Cormorant Asset Management, Foresite Capital, Janus Henderson Investors, Logos Capital, RA Capital Management, Surveyor Capital (a Citadel company), Venrock Healthcare Capital Partners and Wellington Management.

Our strategy

Our goal is to discover, develop and commercialize next generation targeted therapies for women's cancers. The key elements of our business strategy to achieve this goal include:

- Applying our deep understanding of nuclear receptors — particularly the ER — and mechanisms of resistance to develop novel therapeutic approaches for endocrine-driven cancers.** Our team has spent over a decade characterizing the structure and function of the ER and its role in driving tumor cell proliferation in HR+ breast cancer. Our knowledge of the ER's functional domains combined with our medicinal chemistry expertise has allowed us to develop a potent and oral compound that both completely inactivates and strongly promotes degradation of the ER in nonclinical studies. We believe OP-1250's oral formulation and dual mechanism of action as a CERAN/SERD directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and has the potential to drive deeper, more durable responses.
- Rapidly advancing our lead product candidate, OP-1250, through clinical development as a monotherapy for ER+/HER2- breast cancer.** We are currently evaluating OP-1250 monotherapy in a Phase 1/2 dose escalation and expansion clinical trial in patients with recurrent, locally advanced or metastatic ER+/HER2- breast cancer whose disease has progressed on endocrine therapy. We expect to report initial data from this trial in the second half of 2021. After examining safety and PK as well as determining the RP2D, we intend to advance OP-1250 into Phase 2 dose expansion cohorts, and to study OP-1250 in patients with earlier stage disease. We also plan to study OP-1250 in selected breast cancer populations, including pre-menopausal women and patients with mutations in the estrogen-binding domain of ESR1, the gene that encodes the ER.
- Establishing OP-1250 as the endocrine therapy of choice with targeted therapy combinations for the treatment of metastatic ER+ breast cancers.** We believe OP-1250's differentiated product profile has the potential to overcome many of the limitations of current treatment options. We plan to explore the potential clinical benefit of OP-1250 in combination with other approved agents for breast cancer, such as inhibitors of CDK4/6 and PI3K α , which have been shown to lead to improvements in both progression-free and overall survival. At low concentrations in nonclinical models, OP-1250 worked in combination with inhibitors of CDK4/6 and PI3K α . In July 2020, we entered into a non-exclusive agreement with Novartis to evaluate the combination of OP-1250 and ribociclib, a CDK4/6 inhibitor as well as alpelisib, a PI3K α inhibitor. Our goal is to successfully demonstrate improved efficacy and a favorable tolerability profile in combination with other targeted therapies in order to position OP-1250 as the endocrine therapy of choice.
- Exploring additional clinical opportunities for OP-1250, including metastatic breast cancer with brain metastases and other hormone sensitive tumors.** Metastatic breast cancer is the second most common cancer associated with brain metastases in the United States. Of women with ER+ metastatic breast cancer, 10-15% will develop brain metastases, which present a significant challenge to systemic therapy. The primary treatment for CNS metastases is typically surgery, radiation, or a combination of both and these patients tend to have a poor prognosis. In nonclinical studies, OP-1250 demonstrated robust CNS penetration, and in an intracranial breast cancer brain metastases xenograft study, OP-1250 demonstrated the ability to shrink tumors and improve survival in mice. In addition, combining OP-1250 with HER2 targeted agents may represent an opportunity to improve upon recent advancements in the treatment of CNS disease in patients that express both ER and HER2, as up to 50% of patients with metastatic HER2+ breast cancer develop CNS disease, and the majority of patients with HER2+ breast cancer also express ER. In addition to breast cancer, we intend to explore the use of

OP-1250 in various gynecological malignancies, beginning with endometrial cancer. Approximately 80% of endometrial tumors are “endometrioid” in nature and these tumors are driven by estrogen.

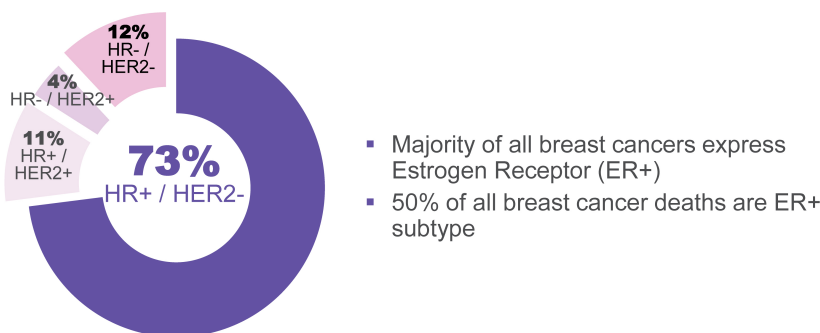
- **Continuing to evaluate opportunities to accelerate development timelines and enhance the commercial potential of our programs in collaboration with third parties.** We own full worldwide development and commercialization rights to OP-1250. We have established a clinical collaboration with Novartis and intend to continue evaluating opportunities to work with partners that meaningfully enhance our capabilities with respect to the development and commercialization of OP-1250. In addition, we intend to commercialize our product candidates in key markets either alone or with partners in order to maximize the worldwide commercial potential of our programs.
- **Expanding our portfolio of therapies focused on women’s oncology through both internal research activities and business development efforts.** We are applying our internal drug discovery capabilities to identify and evaluate novel targeted therapies that can improve the lives of women with cancer. We will continue to explore opportunities to acquire products and technologies that align with our core areas of expertise and complement our existing portfolio.

Our opportunity

Epidemiology and classification of breast cancer

Breast cancer is the second-most common cancer worldwide, with nearly 2 million new diagnoses per year. In 2020, the ACS estimates there will be approximately 276,000 new cases of female breast cancer and over 42,000 deaths in the United States, making it the second-leading cause of cancer death in women. Approximately 2,500 men are also diagnosed with breast cancer each year in the United States. Breast cancer is a heterogeneous disease which is grouped into several clinical subtypes based on the expression of three proteins: ER, PR and HER2. Both ER and PR are hormone receptors, and tumors that express either of these receptors are referred to as HR+. It is unusual for a tumor to express PR in the absence of the ER, therefore most tumors are referred to as either ER+ or ER-. Tumors that express HER2 are denoted HER2+, and tumors that do not express ER, PR or HER2 are classified as triple negative breast cancer. Approximately 75% of all breast cancers are ER+, and approximately 65% are ER+/HER2-, highlighting the central role of ER signaling in driving a large majority of breast cancer. The percentage breakdown of all breast cancers by subtype are shown in the Figure 1.

Figure 1. Types of breast cancer



Treating breast cancer

Early-stage breast cancer

Breast cancer stage is determined by the size of the tumor and whether or not the cancer has spread to lymph nodes. A tumor that is confined to the breast with or without the involvement of local, ipsilateral lymph nodes is considered early-stage breast cancer. Treatment for patients with early-stage breast cancer involves two

components. First, there is local treatment of the breast, chest wall and local lymph nodes, if any, with surgery, either a lumpectomy or mastectomy, and potentially radiation. Second, based on the biology and characteristics of the tumor, patients may also be offered systemic therapy, referred to as adjuvant therapy, in order to decrease the risk of recurrence of breast cancer anywhere in the body. Systemic therapy can be given either after surgery (adjuvant) or prior to surgery (neoadjuvant) or a combination of both.

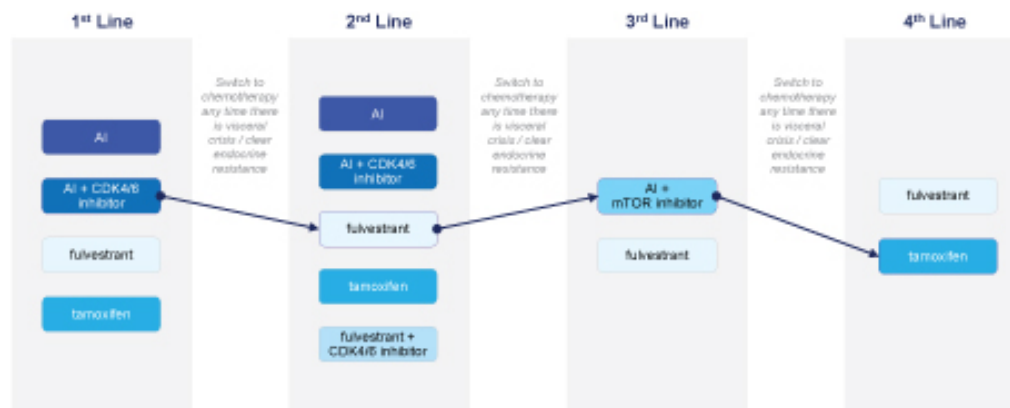
The initial standard of care for patients with early-stage ER+ breast cancer is at least five years of adjuvant endocrine therapy. The endocrine treatment options for early-stage disease are AIs, such as anastrozole, exemestane or letrozole, or an ER antagonist such as a tamoxifen. For patients diagnosed with early-stage ER+ breast cancer who undergo surgical and adjuvant/neoadjuvant treatment, the five-year survival rate is over 90%.

Metastatic breast cancer

When cancer has spread beyond local lymph nodes, either to distant lymph nodes, bones or visceral organs, the cancer is now considered metastatic. Approximately 6-10% of breast cancer patients present with *de novo* metastatic disease, also referred to as stage IV disease, at initial diagnosis. In addition, approximately 20-30% of patients diagnosed with early-stage breast cancer will develop metastatic disease. In contrast to the goals of adjuvant therapy, treatments for metastatic disease are palliative with the desired outcome of controlling symptoms and extending survival as long as possible. The current five-year survival rate for patients with ER+ metastatic breast cancer is approximately 30%.

While there are national guidelines and recommendations for the treatment of metastatic breast cancer, the actual treatment decision is based on a combination of individual patient characteristics and tumor biology, including whether they received adjuvant therapy and if so, how quickly the cancer recurred. There is significant overlap in the agents that are recommended, but guidelines vary in the sequence in which these agents are used. In the past five years, several new classes of targeted therapies have been approved to be used in combination with endocrine agents for the treatment of HR+/HER2- breast cancer. Inhibitors of CDK4/6, such as palbociclib, ribociclib and abemaciclib, used in combination with an AI or fulvestrant, led to significant increases in progression-free survival and overall survival. Alpelisib, a PI3K α inhibitor, was approved in 2019 in combination with fulvestrant for the treatment of HR+/HER2- breast cancers that have mutations in PIK3CA. Figure 2 shows the endocrine treatment options available for ER+ metastatic breast cancer, and an example of the sequence of treatments, by agent and line of therapy.

Figure 2. Available endocrine options and example of sequential alternating of endocrine based therapy in ER+ metastatic breast cancer



When moving a patient from one line of therapy to the next, the standard of care is to switch to an endocrine agent with a different mechanism of action depending upon last therapy, co-morbidities, and individual patient characteristics.

Metastatic breast cancer is the second most common cancer associated with brain metastases in the United States. About 10-15% of women with metastatic breast cancer develop brain metastases. Brain metastases present a significant challenge to systemic therapy, and the primary treatment for CNS metastases is typically surgical resection, radiation, or a combination of both. Given the limited treatment options available for these patients, the prognosis remains poor, making it an area of continued, high unmet medical need. In addition, brain metastases in breast cancer patients are a major cause of morbidity, associated with progressive neurologic deficits that result in a reduced quality of life.

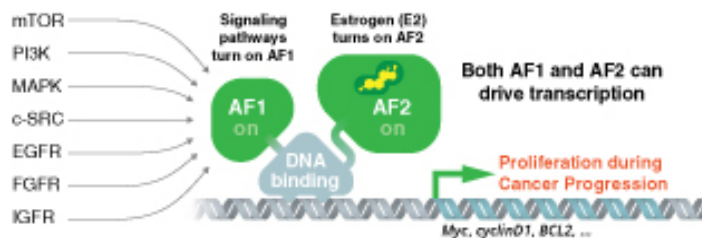
ER signaling in cancer

The ER is a nuclear receptor that functions as a ligand regulated transcription factor. When bound to estrogen, the ER directs the expression of genes that are essential for breast cancer cells' survival and proliferation. The ER has three modular functional domains:

- The amino terminal domain, which contains the activation function 1, or AF1, the activity of which can be increased by multiple cell proliferative signaling pathways;
- The DNA binding domain, which directs the ER to bind to a specific set of ER-responsive genes; and
- The ligand binding domain, which contains the activation function 2, or AF2, which is turned on when bound to estrogen.

Activation of either AF1 or AF2 can drive transcription and cancer cell proliferation.

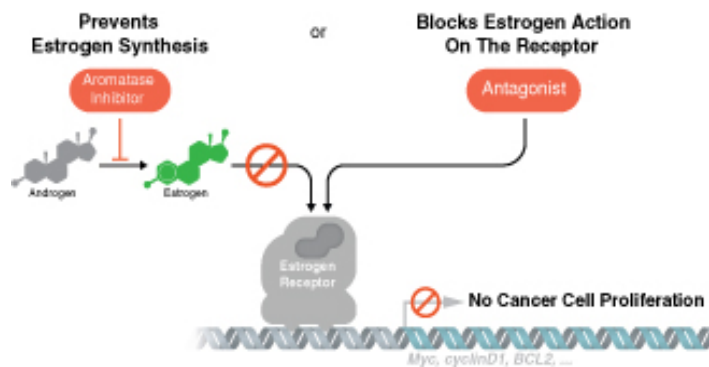
Figure 3. ER is a tripartite protein with two distinct transcription factor activation domains, AF1 and AF2



Classes of endocrine therapies and their limitations

For more than four decades, researchers have been developing new approaches and therapies to prevent activation of the ER pathway, thereby inhibiting the ability of the ER to drive tumor cell growth. Figure 4 describes the two major classes of endocrine therapies, AIs and ER antagonists. In 2019, worldwide sales for endocrine and targeted therapies treating ER+ breast cancer patients totaled \$9.6 billion.

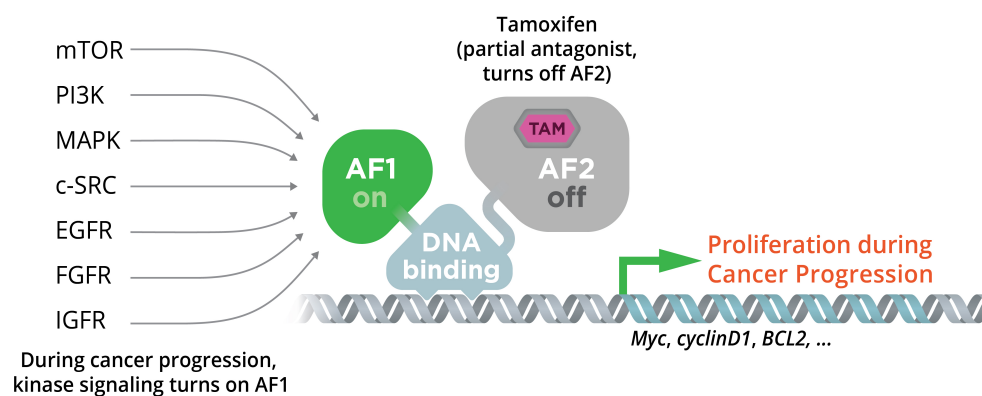
Figure 4. Classes of endocrine therapies



Antagonists with partial agonist activity

In 1977, the first endocrine therapeutic, tamoxifen, was approved by the FDA for the treatment of breast cancer. Although tamoxifen directly competes with estrogen and prevents activation of the AF2 transcription factor activation domain, it does not block AF1 activity and therefore does not completely inhibit ER function (Figure 5). As a consequence of this partial agonist activity, tamoxifen mimics estrogen in some circumstances and promotes proliferation. In addition, some breast cancers can develop resistance to these partial agonists by activation of upstream AF1 signaling pathways, such as mTOR, PI3K, MAPK, c-SRC, EGFR, FGFR and IGFR. Therefore, while tamoxifen is commonly used today, it is challenged by acquired drug resistance and a relatively short duration of response.

Figure 5. Partial agonists, such as tamoxifen, are unable to completely block ER activation



AIs

In search for a different mechanism to target the estrogen pathway, AIs were developed in the 1990s to block the synthesis of estrogen and deprive the ER+ tumor of its activating ligand. However, most patients with metastatic breast cancer have been shown to ultimately develop resistance to these therapies. Similar to tamoxifen, resistance to AIs, such as anastrozole, exemestane or letrozole, can develop by multiple mechanisms, including activation of the AF1 pathway and development of mutations. Mutations in ESR1 that confer estrogen-independent ER activity arise in 30-40% of patients receiving AI treatment.

SERDs

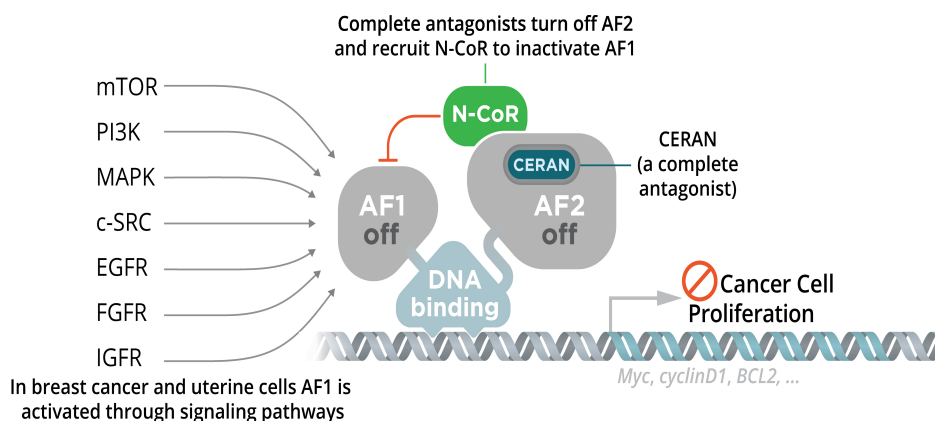
In the search for more potent ER antagonists, researchers focused on another class of ER drugs that were described as SERDs. This classification arose from the observation that certain ligands bind tightly to ER leading to ER degradation. The field shifted drug discovery efforts to SERDs based on the hypothesis that degrading ER would be more efficacious than inhibiting it. However, similar to tamoxifen, many compounds with SERD activity are not complete ER antagonists nor do they achieve complete degradation of the ER. Recent experiments conducted by us and third parties in nonclinical models of breast cancer suggest that ER degradation, as achieved by many SERDs, on its own is not sufficient to effectively treat tumors and that the ability to completely inhibit ER function is best achieved through complete antagonism.

CERANs

A CERAN is a molecule that completely blocks the ability of both AF1 and AF2 to stimulate gene transcription (Figure 6). CERANs inhibit activation of the AF2 transcription factor activation domain and inactivate AF1 activity by recruiting nuclear receptor corepressors of the N-CoR/SMRT family. Previous work by one of our co-founders identified specific interactions between fulvestrant-bound ER and N-CoR and that the strength of these interactions

correlated with the ability of fulvestrant-bound ER to inactivate gene transcription through the transcription factor activating domain, AF1.

Figure 6. CERANs block AF1 and AF2 activity inhibiting cell proliferation



CERANs block AF1 activity, even in the presence of signaling, inhibiting cell proliferation

In 2002, fulvestrant was approved as a treatment for HR+ metastatic breast cancer and is typically used as a second- or third-line endocrine agent. Fulvestrant represented a breakthrough for the field based on its dual-mechanism of action as a CERAN and SERD which led to improved efficacy outcomes for patients. However, fulvestrant, the only FDA-approved anti-estrogen lacking agonist-type effects in *in vivo uterotrophic assays in immature or ovariectomized mice and rats*, has several limitations including:

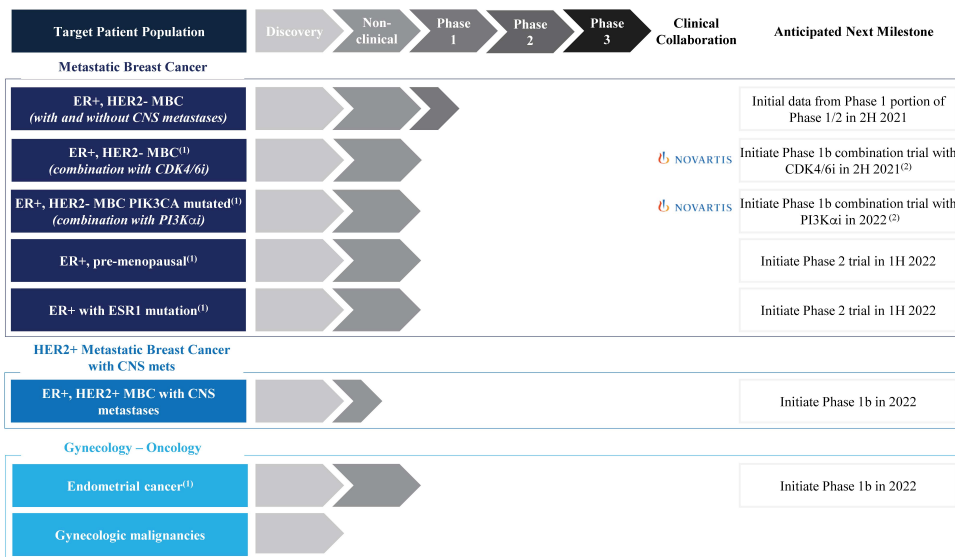
- **Painful and inconvenient route of administration.** Fulvestrant is a highly insoluble compound with poor oral bioavailability and therefore must be given intramuscularly. Fulvestrant is administered every 28-days in two 5 ml intramuscular injections into the buttocks. Injection site reactions occur in approximately 10% of patients and include sciatica, neuralgia, neuropathic pain, and peripheral neuropathy.
- **Suboptimal drug exposure limits efficacy.** In a nonclinical mouse model, an increase in antitumor activity and ER degradation was observed as the dose of fulvestrant was increased from 25 mg/kg to 200 mg/kg. However, researchers estimated that achieving an equivalent level of fulvestrant in humans to a 200 mg/kg dose in mice would require a dose that is eight times higher than is currently clinically achievable. Furthermore, xenograft models created using patient-derived tumors containing ESR1 mutations show that even plasma levels substantially higher than those achievable in humans at the approved dose fail to demonstrate optimal antitumor effect.

Despite the drawbacks of fulvestrant, it achieved worldwide sales of over \$1.1 billion in 2019.

To address the limitations associated with available treatments for ER+ breast cancer patients, we believe an orally available, potent CERAN/SERD that both completely inactivates and strongly promotes degradation of the ER has the potential to become the endocrine therapy of choice for the treatment of ER+ breast cancers and drive deeper, more durable responses.

Our product candidate

We own worldwide development and commercialization rights to OP-1250. As summarized in the figure below, our plan is to develop OP-1250 for the treatment of a number of ER+ breast cancer indications, both as a monotherapy and in combination with approved targeted therapies that have shown improved outcomes with other endocrine therapies.



⁽¹⁾ Patient population may be studied as additional cohort(s) of current Phase 1/2 clinical trial or may be studied in a separate clinical trial.

⁽²⁾ Anticipated initiation of Phase 1b is after determination of RP2D of current Phase 1/2 trial.

Our solution, OP-1250

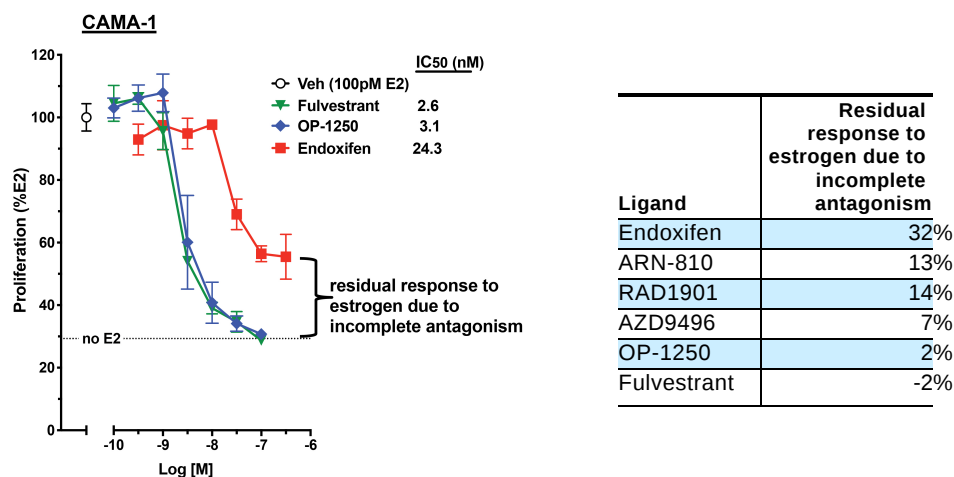
OP-1250 is an oral small molecule clinical-stage product candidate for the treatment of endocrine-driven cancers. OP-1250 was designed by our scientific team based both on a detailed structural understanding of the ER and on known alterations to this structure induced by fulvestrant and other ER ligands. We have demonstrated in nonclinical studies that OP-1250 functions both as a CERAN, inactivating both AF1 and AF2 transcriptional activation functions, and a SERD, promoting degradation of the ER. In several xenograft models, OP-1250, both as a monotherapy and in combination with CDK4/6 inhibitors demonstrated robust tumor shrinkage, including a breast cancer brain metastasis model. We are currently enrolling patients for our Phase 1/2 dose escalation and expansion trial for the treatment of recurrent, locally advanced or metastatic ER+/HER2- breast cancer, and expect to report initial data from this trial in the second half of 2021. We believe OP-1250's oral formulation and dual mechanism of action directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and position OP-1250 as a potential endocrine therapy of choice for the treatment of ER+ breast cancers.

Nonclinical data

Potent anti-proliferative activity

In nonclinical studies, we found that OP-1250 was a potent inhibitor of proliferation and a strong degrader of the ER in multiple breast cancer cell lines. In a cell proliferation assay using CAMA-1 cells, a human breast cancer line that is partially resistant to tamoxifen, administration of OP-1250 led to concentration-dependent anti-proliferative activity with a half maximal inhibitory concentration, or IC₅₀, of 3.1 nM. The IC₅₀ is the concentration of OP-1250 resulting in inhibiting estrogen-stimulated proliferation by 50%. We observed a similar potency in this cell line for fulvestrant. Endoxifen, a key active metabolite of tamoxifen, had a weaker potency in this assay, requiring a concentration of 24.3 nM to achieve an IC₅₀.

Figure 7. OP-1250 inhibits the proliferation of CAMA-1 cells

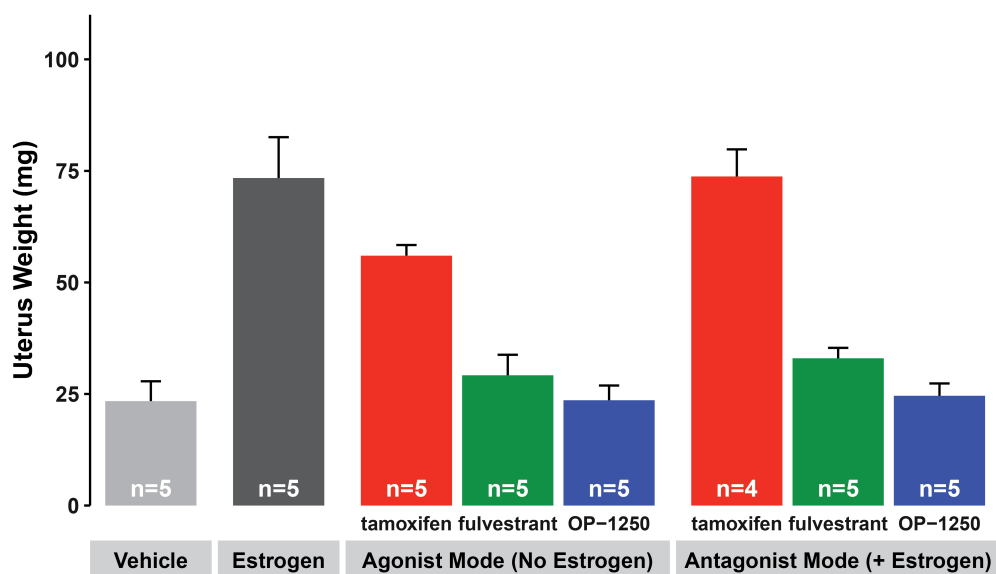


In vitro cell proliferation experiment measuring DNA content after 8-day treatment of CAMA-1 breast cancer cells with ligands in the presence of 100 pM 17 β -estradiol, or E2. Shown in the left side dose response graph of Figure 7 are mean values normalized to vehicle, or +E2, along with error bars representing the standard error of the mean, or SEM, from triplicate wells. Residual response to estrogen due to incomplete antagonism is the amount of proliferation remaining at saturating drug concentration relative to the proliferation seen in the absence of estrogen. Shown in the right side table of Figure 7 is mean percent residual proliferative response to estrogen calculated over multiple experiments after normalizing to +E2 (100%) and -E2 (0%) for endoxifen and some SERDs with incomplete antagonism, ARN-810, AZD9496, RAD1901, and the CERANS OP-1250 and fulvestrant.

Complete ER antagonism

A key distinguishing feature of CERANS is that they completely lack any agonistic estrogen-like effects, and completely block the effects of estrogen. A nonclinical model often used to assess the residual agonistic effect of ER antagonists is the ovariectomized mouse uterine weight model. In this model, removal of the ovaries eliminates the primary source of estrogen in the mouse and limits the development of uterine tissue. As shown in this head-to-head comparison study, dosing of these mice with estrogen leads to an increase in the weight of uterine tissue. Administration of tamoxifen in the absence of estrogen also results in an increase in uterine weight, illustrating that tamoxifen possesses some agonistic activity on ER in certain biological contexts. Furthermore, tamoxifen is unable to block the effect of estrogen in this model. Neither OP-1250 nor fulvestrant led to an increase in uterine weight in the absence of estrogen and both suppressed the stimulatory activity of estrogen, illustrating that OP-1250 and fulvestrant are CERANS.

Figure 8. OP-1250 and fulvestrant, both CERANs, lacked any ER agonistic activity and completely blocked ER activation by estrogen in an ovariectomized mouse uterine weight head-to-head comparison model

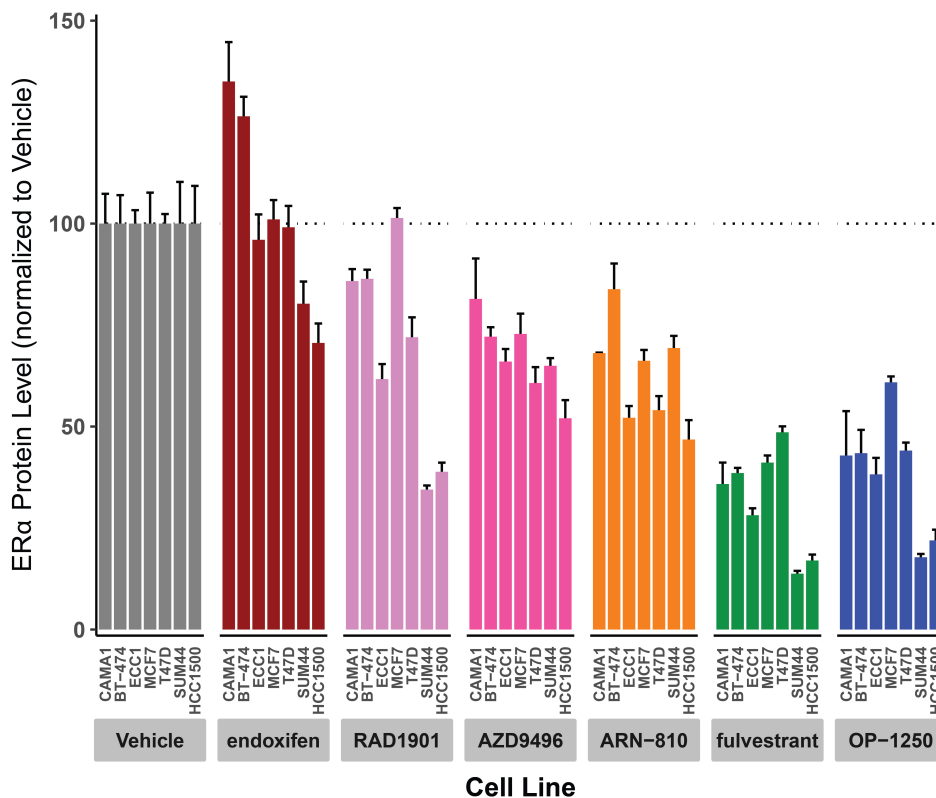


Uterine wet weight in ovariectomized BALB/c mice treated once daily for 3 days. Mice were treated with 100 mg/kg of OP-1250, 50 mg/kg of tamoxifen, 50µl of fulvestrant and/or 0.1 µg estrogen (E₂). OP-1250 and tamoxifen were delivered orally, and E₂ and fulvestrant were delivered subcutaneously.

SERD activity

SERDs are ER ligands that lead to partial degradation of the ER. This degradation takes place within four hours after exposure of cells to the SERD, indicating that it comes from destabilization of the ER protein. In a nonclinical analysis, we have tested the ability of OP-1250, fulvestrant and several non-CERAN SERDs (specifically, RAD1901, ARN-810, AZD9496) to degrade ER across seven different cell lines. As shown in Figure 9, after treatment of these cell lines for four hours, there was a dramatic difference in the effect on ER destabilization. Endoxifen, the active metabolite of tamoxifen, had virtually no effect and RAD1901, ARN-810 and AZD9496 degraded the ER to some degree in several of the cell lines. In contrast, fulvestrant and OP-1250 profoundly degraded the ER in each one of the cell lines, and the level of ER degradation for the cell lines treated with OP-1250 was consistent with that of fulvestrant.

Figure 9. OP-1250 degrades ER similarly to fulvestrant in seven tested cell lines.



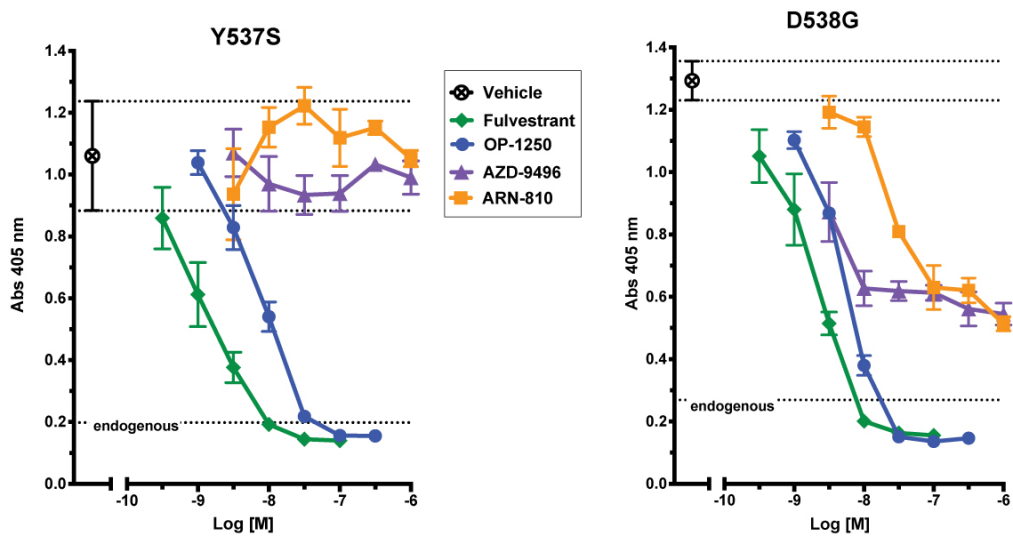
ER α protein levels were measured by western blot following treatment with indicated compound in a panel of six ER+ breast cancer cell lines (CAMA-1, BT-474, MCF-7, T47D, SUM44, HCC1500) and one ER+ endometrial cancer cell line. ER α protein levels by culturing breast cancer cell lines with 316 nM ligand in E2-depleted media for 4 hours. Protein lysates were immunoblotted with an antibody to ER α . Shown are mean ER α protein levels normalized to vehicle, and SEM from triplicate wells.

Potent antagonist activity on both wild-type and mutant ER

Treatment of breast cancers with AI therapy has been shown to lead to the development of resistance mutations in the ESR1 gene. These mutations are acquired during treatment and are found in less than 2% of untreated early-stage breast tumors but in 30-40% of metastatic tumors after treatment with AIs. More than 80% of mutations are found at three locations corresponding to amino acid residues 380, 537 and 538.

These mutations result in resistance to many estrogen therapies. We assessed the ability of estrogen compounds to inhibit ER-dependent transcription in cell lines containing ER alleles with mutations that have been found in patients. We used alkaline phosphatase, which is encoded by a gene activated by the ER primarily through the AF1 transcriptional activation function and has an enzymatic activity that can be readily measured in cells, as a surrogate for ER driven target gene transcription. We tested two clinical stage SERD compounds: ARN-810, also known as GDC-0810, a discontinued compound previously in Phase 2 clinical development by Genentech; and AZD9496, an AstraZeneca compound that has presented Phase 1 data. Both compounds were unable to fully inhibit the activity of the mutant ER. At the highest concentrations tested of approximately 1 μ M, these compounds were unable to fully inhibit the alkaline phosphatase activity stimulated by the D538G mutation and had no activity in cells containing the Y537S mutation. In contrast, both OP-1250 and fulvestrant were able to fully inhibit the alkaline phosphatase activity in cells containing these mutations. These observations suggest that tumors that become resistant to other estrogen therapies may remain sensitive to OP-1250.

Figure 10. Both OP-1250 and fulvestrant inhibit the activity of the ER containing mutations that commonly arise in breast cancer patients treated with other antiestrogen therapies.



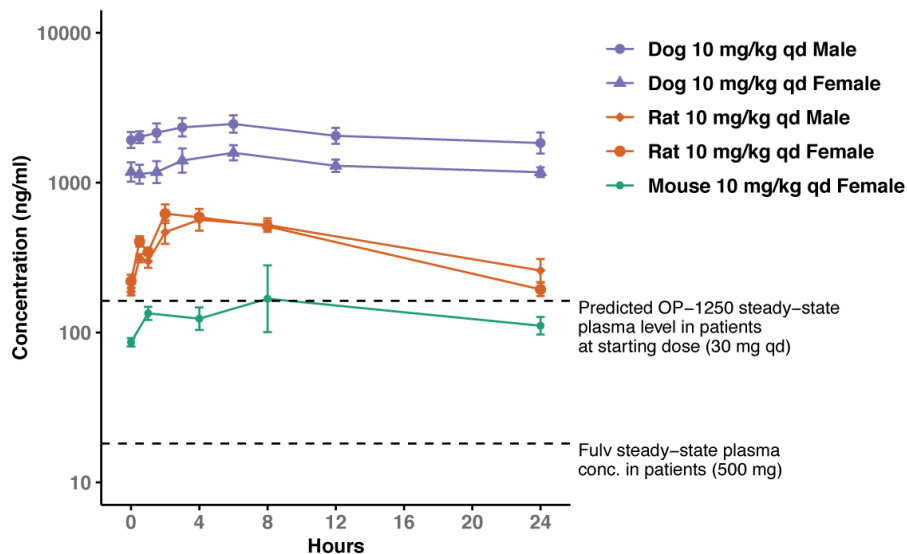
In vitro alkaline phosphatase, or AP, activity mediated by Y537S and D538G mutant ER α in an endometrial cell line. AP activity was assayed by treating transiently transfected Ishikawa cells with ligands in E2-depleted media for 3 days. Absorbance was read after incubation with a chromogenic substrate for AP. Shown are mean values normalized to vehicle, along with SEM from triplicate wells. The line labeled "endogenous" represents the mean AP activity of cells transfected with an empty vector, indicating the AP activity of the endogenous receptor. ARN-810, also known as GDC-0810, has been discontinued by Genentech.

Orally available, once daily dose

In animal studies, OP-1250 has demonstrated high oral availability with favorable exposure in four model species: mouse, rat, dog, and cynomolgus monkey; with a half-life supportive of once daily dosing in humans. Repeat daily dosing in these studies demonstrated that at steady-state the plasma levels of OP-1250 were relatively constant through the entire 24-hour period with little peak to trough variation. We believe that oral dosing of OP-1250 has the potential to achieve much higher drug levels as compared to fulvestrant administration

which requires two intramuscular injections every four weeks. The profile of OP-1250 is consistent with daily oral dosing in humans and we believe that we will be able to achieve targeted drug exposure levels with a once daily dose.

Figure 11. Steady state drug levels of OP-1250 following once daily dosing showed high plasma levels throughout the entire day

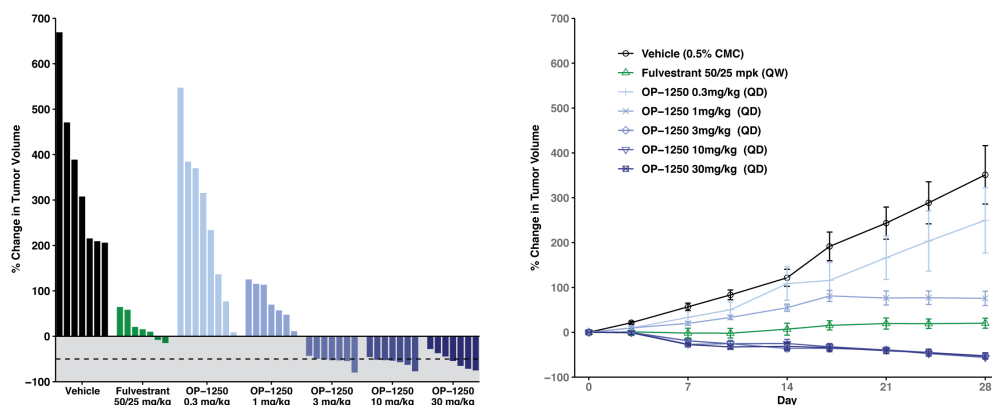


OP-1250 was dosed daily orally by gavage in the mouse rat and dog. After multi-day dosing, plasma levels were measured over the 24 hours following the last dose. Plasma levels were high, reached steady state, and showed allometric scaling.

Potent tumor shrinkage in nonclinical models

OP-1250 shrank or eliminated tumors in a wide variety of xenograft models including in an ovariectomized mouse breast cancer model designed to mimic the endocrine environment of post-menopausal women using HCl-013E1, an estrogen-independent patient-derived xenograft model containing a Y537S mutation. In this model, tumor growth occurred even in the absence of estrogen production due to the constitutive or always-on activity of the Y537S mutant ER protein. At daily oral doses of 3 mg/kg and higher, dosing with OP-1250 led to tumor reductions in all treated mice. In contrast, fulvestrant led to a detectable reduction in only two of the seven treated mice.

Figure 12. At daily oral doses of 3 mg/kg and above, treatment with OP-1250 led to tumor shrinkage in all treated mice in an HCl-013EI patient-derived xenograft model

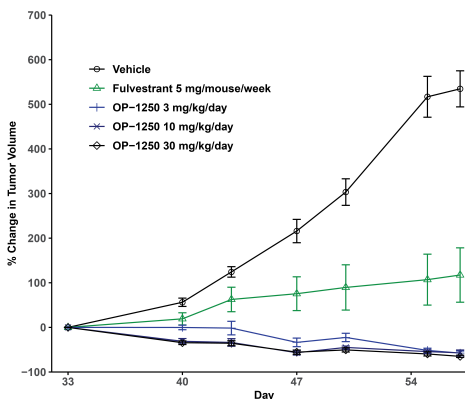
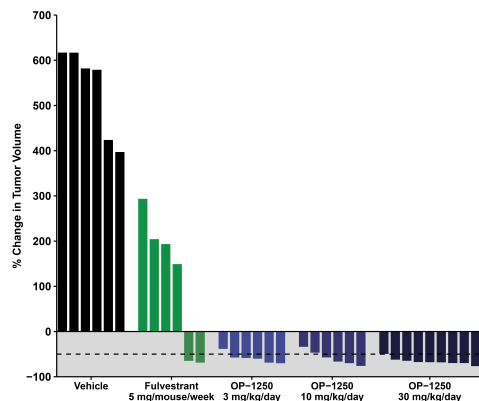


Change in tumor volume of HCl-013EI patient-derived tumors, carrying the Y537S mutation in the ER and adapted to grow without estrogen, implanted in the mammary fat pad of non-obese diabetic, or NOD/SCID ovariectomized mice. Mice were treated with oral OP-1250 at the dose indicated, or with subcutaneous fulvestrant (Faslodex preparation). Upper panel shows tumor size of each tumor measured with calipers at termination. Lower panel shows mean tumor size of each treatment group of 8 over the course of the study.

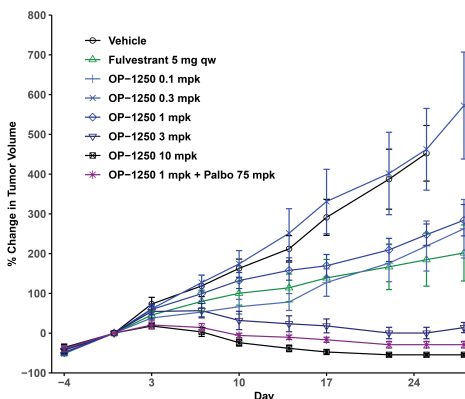
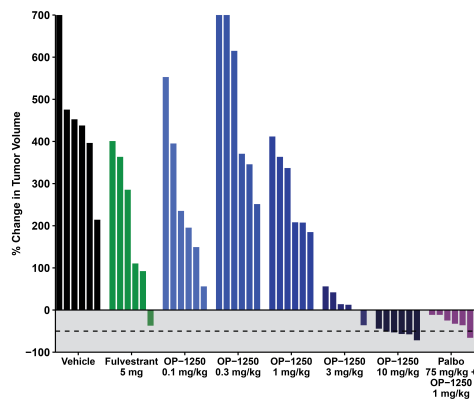
Daily oral dosing with OP-1250 led to tumor shrinkage in multiple xenograft models in mice with intact ovaries. These models included the HCC1500 cell line, which have wild-type ER and the ST941 and HCl-013 patient-derived xenograft models, both of which contain ERs that have the Y537S mutation. Similar to what was seen in the ovariectomized mouse model, OP-1250 demonstrated more potent antitumor activity than fulvestrant, which failed to consistently shrink tumors in any of these models.

Figure 13. OP-1250 led to tumor shrinkage in multiple breast cancer xenograft models in mice including HCC1500, which contain wild-type ER, and ST941 and HCI-013, which contain the Y537S mutation in ER

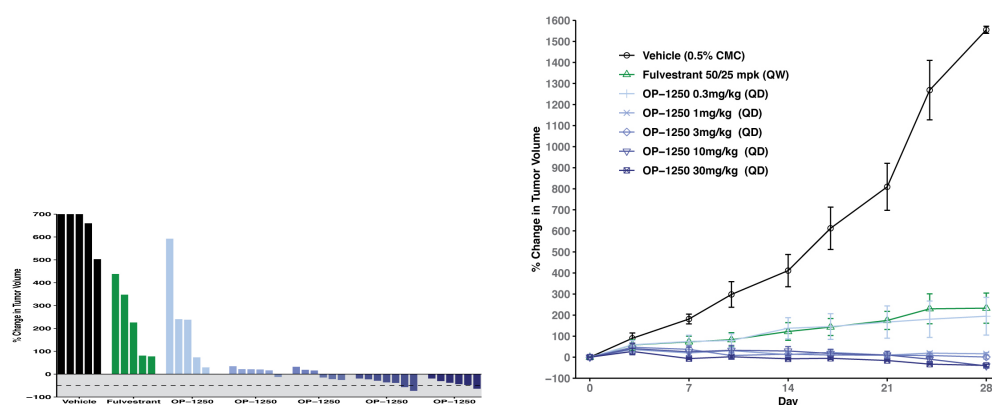
HCC1500



ST941



HCI-013



Change in tumor volume of various human xenograft tumors implanted in the mammary fat pad of ovary intact immunodeficient mice supplemented with estrogen releasing pellets and treated with the indicated dose of oral OP-1250, oral OP-1250 plus oral palbociclib, or subcutaneous fulvestrant (Faslodex preparation). Left panel of Figure 13 shows tumor size of each tumor measured with calipers at termination. Right panel shows mean tumor size of each treatment group of 8 over the course of the study. HCC1500, wild type ER cell line implanted in NSG mice; ST941 patient derived xenograft, or PDX, model with Y537S ER in JAX nude mice; HCI-013 PDX model with Y537S ER in NOD/SCID mice.

Drug accumulation in tumors

We observed that OP-1250 was consistently more effective in shrinking tumors in xenograft models than fulvestrant, despite the roughly equal potency of OP-1250 and fulvestrant in cell culture assays in which the drug is added directly to the cells. Detailed analyses of the tissue distribution of these two molecules identified that OP-1250 became concentrated in tumors many-fold greater as compared to plasma. By contrast, the tumor-to-plasma ratio for fulvestrant was 2 to 3.

Figure 14. Levels of OP-1250 were many-fold higher in tumors compared to those in plasma

| Treatment | Dose (mg/kg) | Plasma (ng/mL) | Tumor (ng/g) (assuming density of 1g/mL) | Tumor to Plasma Ratio |
|-------------|--------------|----------------|--|-----------------------|
| OP-1250 | 0.3 | 1 | 11.5 | 12.84 |
| OP-1250 | 1 | 10 | 106 | 10.8 |
| OP-1250 | 3 | 54 | 1,463 | 27.0 |
| OP-1250 | 10 | 344 | 13,610 | 39.5 |
| OP-1250 | 30 | 1,226 | 55,184 | 45.0 |
| Fulvestrant | 50/25 | 69 | 175 | 2.6 |

OP-1250 was dosed daily orally by gavage in the mouse. Plasma levels were measured by high performance liquid chromatography, or HPLC. Tumors were removed surgically, weighed, macerated, and extracted to determine the concentration of OP-1250.

Brain penetration

There remains an unmet medical need in the treatment of patients with metastatic ER+/HER2- breast cancer that has spread to the brain. The challenges in treating brain metastasis are multifactorial and likely include the presence of resistance mutations and the inability to achieve efficacious levels of effective drugs in brain tissue. In mice, we found that OP-1250 reached drug levels in the brain as high as 50% greater than in plasma. Combined

with the ability to achieve higher drug levels with OP-1250, due to its improved PK properties, than fulvestrant, we found that we could obtain brain exposure to concentrations of OP-1250 that were greater than 30 times that of fulvestrant.

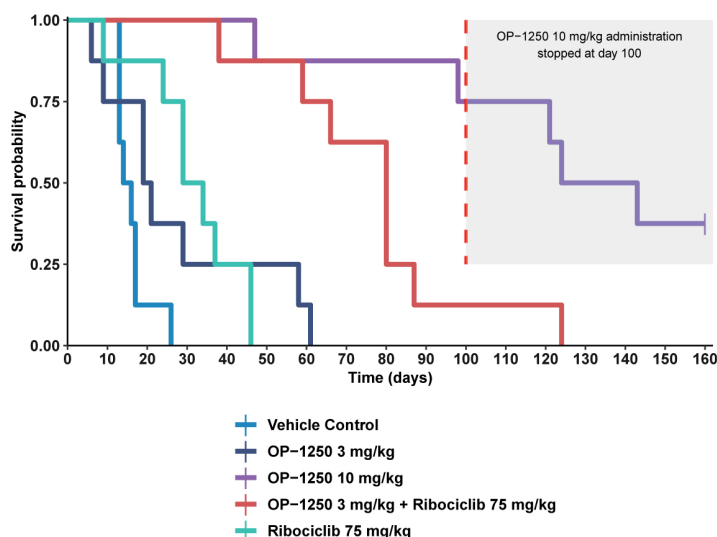
Figure 15. OP-1250 demonstrated robust CNS penetration in the mouse brain

| Treatment | Dose (mg/kg) | Brain Concentration (ng/g) | Plasma Concentration (ng/mL) | Brain to Plasma Ratio |
|-------------|--------------|----------------------------|------------------------------|-----------------------|
| OP-1250 | 1 | 5 | 10 | 0.4 |
| OP-1250 | 3 | 45 | 54 | 0.8 |
| OP-1250 | 10 | 499 | 344 | 1.4 |
| OP-1250 | 30 | 1920 | 1,226 | 1.6 |
| Fulvestrant | 50/25 | 60 | 69 | 0.9 |

OP-1250 was dosed daily orally by gavage in the mouse. Plasma levels were measured by HPLC. Cranial tissue samples removed surgically, weighed, macerated, and extracted to determine the concentration of OP-1250.

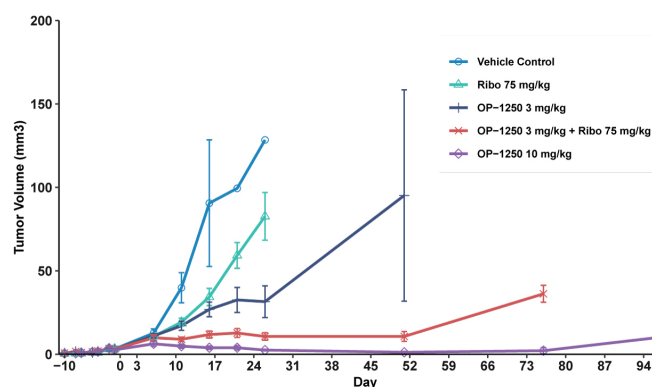
OP-1250 was effective in an intracranial xenograft brain metastasis model, in which ST941 tumor cells were implanted directly into the brain by stereotactic surgery. Tumors were stimulated with estrogen and allowed to grow for two or three weeks and their presence in the brain confirmed by MRI. The mice were then treated with one of the following: 3 mg/kg OP-1250; 10 mg/kg OP-1250; 75 mg/kg ribociclib, a CDK4/6 inhibitor known to cross the blood brain barrier; a combination of 3 mg/kg OP-1250 and 75 mg/kg ribociclib; or vehicle control. Mice were treated once daily for up to 100 days and followed for tumor size with MRI and survival. Monotherapy with 3 mg/kg OP-1250, or 75 mg/kg ribociclib, had small effects on survival, but the combination of both compounds increased survival five-fold from 15 to 80 days compared to vehicle control. In further contrast, mice treated with 10 mg/kg OP-1250 did not reach median survival at 100 days. No detectable tumors were found in six of the seven then surviving mice after 80 days, and six of eight mice were still alive after 100 days. Treatment was stopped at 100 days and the survival of the mice was followed. In this high dose, OP-1250 group median survival was reached at 125 days, despite suspension of therapy at day 100. At the conclusion of the experiment at day 160, two of the three surviving mice had no detectable brain tumor and the third had a slowly growing tumor. We believe that the ability of OP-1250 to eradicate brain metastasis in mice demonstrates the potential of OP-1250 to advance the treatment of patients with breast cancer with brain metastases.

Figure 16. Treatment with 10 mg/kg OP-1250 led to long-term survival in a xenograft model of breast cancer brain metastases



The figure above highlights an experiment in an intracranial breast cancer brain metastases xenograft study. Endpoints were tumor volume and survival. Shown is a Kaplan-Meier plot showing the percentage of surviving mice in each group over time. Tick marks indicate censored data reflecting that mice were enrolled on different days. Dashed red line shows cessation of treatment in OP-1250 10 mg/kg group.

Figure 17: Treatment with 10 mg/kg OP-1250 led to tumor shrinkage in a xenograft model of breast cancer brain metastases

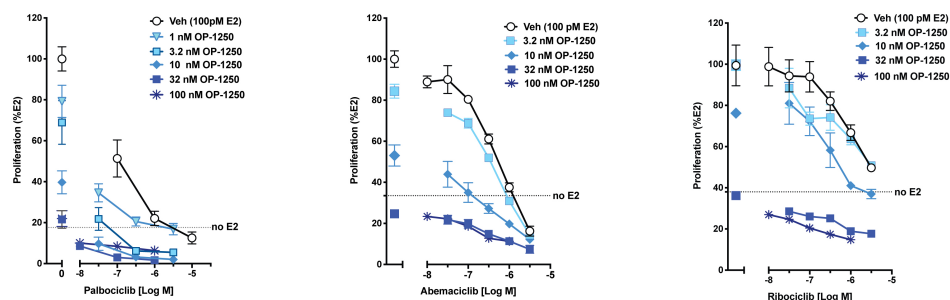


ST941 PDX material was stereotactically implanted directly into the brains of nude mice. Tumor volumes were followed and confirmed via MRI prior to inclusion in study. Drugs were administered for up to 100 days and tumor growth was followed via MRI. Daily oral administration of OP-1250 slowed tumor growth in the ST941 brain metastases model at 3 mg/kg, and shrunk tumors at 10 mg/kg. Ribociclib (ribo) at 75 mg/kg also slowed tumor growth but to a lesser degree than did OP-1250 at 3 mg/kg. The combination of 3 mg/kg OP-1250 and 75 mg/kg ribociclib substantially slowed tumor growth, to a much greater degree than 3 mg/kg OP-1250 or 75 mg/kg alone, but did not shrink tumors as OP-1250 as 10 mg/kg OP-1250 did.

Combinations with other breast cancer therapies

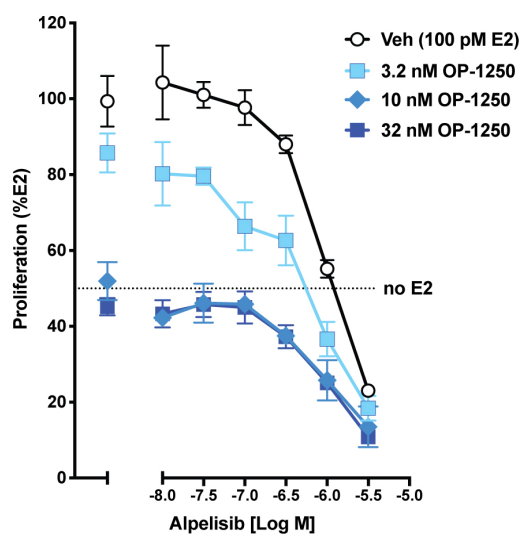
As in most other solid tumors, effective antitumor activity often requires the use of combination therapy. In the case of ER+ breast cancer, for example, activation of the CDK4/6 pathway is associated with resistance to fulvestrant and CDK4/6 inhibitors are routinely used in combination with fulvestrant. We observed that OP-1250 in combination with three different CDK4/6 inhibitors resulted in increased inhibition of MCF-7 cell proliferation as did OP-1250 in combination with the PI3K α inhibitor alpelisib in T47D cells.

Figure 18. The combination of OP-1250 and CDK4/6 inhibitors resulted in potent anti-proliferative activity in MCF-7 cells



In vitro cell proliferation experiment measuring DNA content after 7-day treatment of MCF-7 breast cancer cells with ligands in the presence of 100 pM E2. Shown are mean values normalized to vehicle (+E2), along with SEM from triplicate wells.

Figure 19. The combination of OP-1250 and PI3K α inhibitors resulted in potent anti-proliferative activity in T47D cells



In vitro cell proliferation experiment measuring DNA content after 6-day treatment of T47D breast cancer cells with ligands in the presence of 100 pM E2. Shown are increasing concentrations of alpelisib with three different concentrations of OP-1250, mean values normalized to vehicle (+E2), and SEM from triplicate wells.

Summary of nonclinical properties

We believe OP-1250's oral formulation and dual mechanism of action directly address the limitations of current endocrine therapies, such as fulvestrant and tamoxifen, and position OP-1250 as a potential endocrine therapy of choice for the treatment of ER+ breast cancers. We have demonstrated in nonclinical studies that OP-1250 functions both as a CERAN and a SERD, but is distinguished from fulvestrant in several noteworthy ways, including:

- OP-1250 is orally bioavailable while fulvestrant is a highly insoluble compound that must be administered monthly by intramuscular injection into the buttocks;
- OP-1250 has favorable biodistribution properties leading to higher drug concentrations in the plasma and tumor than those achieved with fulvestrant, as shown in a head-to-head mouse xenograft study; and

- OP-1250 has demonstrated the ability to shrink tumors in head-to-head nonclinical studies with fulvestrant, in contrast to fulvestrant, which has only been shown to inhibit tumor growth.

We believe OP-1250 has the potential to improve clinical outcomes for patients with metastatic breast cancer, initially for patients who have previously received endocrine therapy, as well as those who are treatment naïve in the metastatic setting. Additionally, given the differentiated product profile, we believe that OP-1250 has the potential to advance into the adjuvant setting for early-stage ER+ breast cancer.

Clinical development plan for OP-1250 and additional clinical opportunities

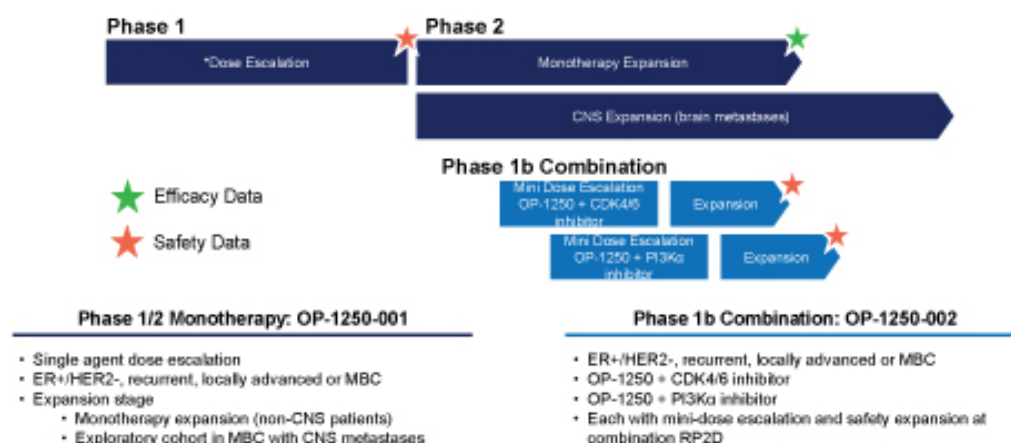
In August 2020, we initiated enrollment in our Phase 1/2 open label, multi-center clinical trial of OP-1250, OP-1250-001, in patients, both women and men, with recurrent, locally advanced or metastatic ER+/HER2- breast cancer. The Phase 1 portion of this trial consists of monotherapy dose-escalation cohorts of three to six patients receiving oral daily doses of OP-1250. The primary objectives of this portion of the trial are to assess safety, tolerability, PK, pharmacodynamics and the determination of the MTD and/or the RP2D. We expect to report initial data from the Phase 1 portion of this trial in the second half of 2021.

After determining the MTD or RP2D for OP-1250 as monotherapy, we expect to initiate enrollment in the Phase 2 dose expansion portion of the trial to assess preliminary anti-tumor efficacy of OP-1250 as assessed by response rate and other clinical endpoints including safety, tolerability and PK. One cohort will enroll metastatic breast cancer patients whose disease has progressed following at least one anti-estrogen therapy in the advanced setting. A second cohort is exploratory and will enroll metastatic breast cancer patients diagnosed with brain metastases. Patients will be treated until progression of disease or unacceptable toxicity. Additionally, ESR1 status and relevant mutations will be evaluated from cell free DNA at various time points throughout the trial in order to assess outcomes in patients with both wild-type and mutant genes.

As of October 23, 2020, the first dose cohort, consisting of four patients, has completed enrollment and the initial 28 day dose limiting toxicity assessment period, and the second dose cohort is enrolling patients. Preliminary PK data from the first dose cohort is consistent with nonclinical modeling of our Phase 1 starting dose.

We currently anticipate enrolling up to 94 patients in the OP-1250-001 trial. We expect such trial to generate safety, PK, response and other data in patients with and without ESR1 mutations, and data in patients that are both pre and post-menopausal. The design of the trial allows the potential to expand our cohorts to include additional patient subsets as the trial design and data help to identify those patients most likely to benefit. A robust monotherapy response rate along with a clinically meaningful duration of response would enable us to move directly to a randomized pivotal trial evaluating OP-1250 versus fulvestrant in either an unselected population, a selected subset (patients with ESR1 mutations) or both.

Figure 20. Designs of the Phase 1/2 OP-1250-001 trial and Phase 1b OP-1250-002 for OP-1250



After the RP2D dose is identified in the current OP-1250-001 trial, OP-1250 will be evaluated in combination with both a CDK4/6 inhibitor, and a PI3K α inhibitor in patients with a PIK3CA mutation. Each combination will be evaluated in an abbreviated dose escalation starting one to two dose levels below the RP2D of OP-1250 identified in the Phase 1 portion of the trial followed by a small expansion cohort to further evaluate the safety of each of the two combinations. Assuming that each combination is well tolerated, and that the monotherapy efficacy data from the Phase 1/2 trial is robust, we could move each combination into a registration directed pivotal trial.

Historically, treatment for pre-menopausal women with ER+ breast cancer was limited to tamoxifen given the dual source of estrogen in women with functioning ovaries. Today, some clinicians will treat pre-menopausal women with luteinizing hormone-releasing hormone, or LHRH, agonists to suppress ovarian function in combination with drugs such as AIs or fulvestrant. Given OP-1250's potency, and our data in nonclinical models of pre-menopausal animals, we intend to further study OP-1250 in pre-menopausal women without the use of LHRH agonists once preliminary data from the OP-1250-001 trial is obtained.

While all populations described above are in patients with ER+/HER2- breast cancer, we believe that there is an opportunity for us to study OP-1250 in patients with ER+/HER2+ breast cancer, which represents approximately 11% of breast cancer patients and more than 50% of the patients with HER2+ breast cancer. In particular, up to 50% of patients with metastatic HER2+ breast cancer develop CNS disease. Combining OP-1250 with HER2 targeted agents may represent an opportunity to improve upon recent advancements in the treatment of CNS disease in patients that express both ER and HER2.

In addition to breast cancer, we intend to explore the use of OP-1250 in various gynecological malignancies, beginning with endometrial cancer. Approximately 80% of endometrial tumors are "endometrioid" in nature and these tumors are driven by estrogen.

While our initial trials are focused on treating breast cancer patients with metastatic disease, we believe that if OP-1250 is determined to be safe and effective in this population, there is potential for it to be used in earlier stage disease. Based on our extensive nonclinical studies, including certain head-to-head studies, we believe that OP-1250 could have superior PK properties and improved clinical outcomes than fulvestrant. If proven in the clinic, we believe that OP-1250 has the potential to not only replace fulvestrant but to become the endocrine treatment of choice for the treatment of both advanced/metastatic ER+ breast cancer as well as ultimately in early-stage ER+ breast cancer in the adjuvant setting.

Clinical trial collaboration and supply agreement with Novartis

In July 2020, we entered into a non-exclusive Clinical Collaboration and Supply Agreement, or the Novartis Agreement, with Novartis. The collaboration is focused on the evaluation of the safety, tolerability and efficacy of OP- 1250 in combination with Novartis' proprietary CDK4/6 inhibitor Kisqali® (ribociclib) and/or Novartis' proprietary phosphatidylinositol 3-kinase inhibitor Piqray® (alpelisib), or collectively the Novartis Study Drugs, as part of our planned Phase 1b clinical trial of OP-1250 in patients with metastatic ER+ breast cancer. We will be responsible for the conduct of the clinical trials for the combined therapies in accordance with a mutually agreed development plan. As part of the collaboration, the parties granted to each other a non-exclusive, royalty-free license under certain of the parties' respective background patent rights and other technology to use the parties' respective study drugs in research and development, solely to the extent reasonably needed for the other party's activities in the collaboration. All inventions and data developed in the performance of the clinical trials for the combined therapies (other than those specific to each component study drug), will be jointly owned by the parties.

We are responsible for manufacturing, packaging and labeling OP-1250, and for packaging and labeling all drugs used in the clinical trials for the combined therapies (other than the Novartis Study Drugs). Novartis is responsible for manufacturing and delivering to us the Novartis Study Drugs in such quantities as reasonably needed for the clinical trials for the combined therapies. In accordance with an agreed budget, Novartis will

reimburse us for a majority of the direct outside costs that we incur related to conducting the activities under the agreed development plan in conducting the clinical trials for the combined therapies.

The Novartis Agreement will terminate upon completion of all activities outlined in the development plan and the relevant protocols. Either party may terminate the Novartis Agreement for the uncured material breach or insolvency of the other party, if it reasonably deems it necessary in order to protect the safety, health or welfare of subjects enrolled in the clinical trials for the combined therapies due to the existence of a material safety issue, or in certain circumstances for an unresolved clinical hold with respect to either the Novartis Study Drugs or OP-1250. In addition, Novartis may terminate the Novartis Agreement if certain disputes between the parties are not resolved after following the applicable dispute resolution procedures, and we may terminate the Novartis Agreement in the event we terminate all clinical trials of the combined therapies other than due to a material safety issue or upon a clinical hold.

The Novartis Agreement does not grant any right of first negotiation to participate in future clinical trials, and each of the parties retains all rights and ability to evaluate their respective compounds in any studies or clinical trials, either as a monotherapy or in combination with any other product or compound, in any therapeutic area. The parties retain their independent rights to commercialize their respective therapies both alone or with other parties.

Intellectual property

Our success depends, in part, on our ability to obtain, maintain and protect our intellectual property and other proprietary rights for OP-1250 and any future product candidates and other discoveries, inventions, trade secrets and know-how that are critical to our business operations. Our success also depends in part on our ability to operate without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of others, and in part, on our ability to prevent others from infringing, misappropriating or otherwise violating our intellectual property and proprietary rights. A comprehensive discussion on risks relating to intellectual property is provided under the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

Intellectual property rights relevant to pharmaceutical companies typically include a combination of patent rights, regulatory exclusivities, trademark rights, and trade secret protection. Our success depends, in part, on our ability to secure and enforce each of these types of intellectual property rights.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the scope of claims allowable in patents in the field of biotechnology has emerged in the United States and in Europe, among other countries. Changes in the patent laws and rules, either by legislation, judicial decisions, or regulatory interpretation in other countries may diminish our ability to protect our inventions and enforce our intellectual property rights, and more generally could affect the value of our intellectual property. In particular, our ability to stop third parties from making, using, selling, offering to sell, importing or otherwise commercializing any of our patented inventions, either directly or indirectly, will depend in part on our success in obtaining, defending and enforcing patent claims that cover our technology, inventions, and improvements. Regardless of the coverage we seek under our existing patent applications, there is always a risk that an alteration to the product or process may provide sufficient basis for a competitor to avoid infringement claims. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued and courts can reinterpret patent scope after issuance. Moreover, many jurisdictions, including the United States, permit third parties to challenge issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims.

An issued patent provides its owner (or possibly its licensee) with a right to exclude others from making, using or selling that which is claimed in the patent, for a specified period of time (the “term” of the patent), in the jurisdiction in which the patent is issued. In the United States, and in many other countries, utility patents have a presumptive term of 20 years from their effective filing date (which is the earliest non-provisional filing date to which the patent claims priority). However, many jurisdictions, including the United States, require the payment of periodic annuities or maintenance fees in order for patents to remain in force for the full 20-year term. The

United States also has provisions that require a patent term to be shortened if its claims are too similar to another patent owned by the same party that has a shorter term. The term of a patent, and the protection it affords, is therefore limited and once the patent term of our issued patents has expired, we may face competition. Because of the extensive time required for clinical development and regulatory review of the drugs we develop, it is possible that, before OP-1250 or any future product candidates we may develop can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent.

The United States and certain other jurisdictions also have provisions that permit extension of patent term for patents that claim a drug or drug product, or its approved use, if the patent was issued before clinical trials and were completed and regulatory approval secured, so long as certain specific requirements were satisfied. In the United States, such extension associated with regulatory approval is called a Patent Term Extension, or PTE, and it is limited to a maximum of five years, or less if the extended patent term would exceed 14 years after the date of regulatory approval. Only one patent can receive regulatory extension (*e.g.*, PTE) per product approval.

The United States also offers a different form of patent term extension, known as Patent Term Adjustment, or PTA, whereby a particular patent's term is automatically extended beyond the 20-year date if the United States Patent and Trademark Office, or the USPTO, caused delay during its examination; however, potentially available PTA is reduced by any amount of any delay caused by the patent applicant. We may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. There can be no assurance that we will benefit from any patent term extension or favorable adjustment to the term of any of our patents.

A provisional patent application can establish a priority date for a patent, but only if certain deadlines and procedures are met. Specifically, a non-provisional application must be filed within 12 months of the provisional filing date, and such non-provisional filing must be made by an applicant who has properly documented its right to claim priority. Furthermore, if any changes are made to the application between the provisional and the non-provisional filings, the changed material may not be entitled to the priority filing date. Still further, in the biopharmaceutical industry, it is common for applicants to file a so-called "international" patent application under the Patent Cooperation Treaty, or PCT, as a non-provisional filing. Such an international application, often referred to as a "PCT application," like a provisional application, cannot itself issue as a patent but rather preserves the applicant's right to pursue patent filings in individual countries, which patent filings are referred to as "national applications" or "national phase filings" and can claim the benefit of priority to the prior PCT application (which may in turn claim priority to the prior provisional filing). For most jurisdictions, national phase applications claiming priority to a PCT application must be filed within 30 to 32 months of the PCT's earliest priority date. If we fail to meet the deadline for filing non-provisional or national phase applications, or fail to complete all procedural requirements associated with such filings, we may lose our right to claim priority. Moreover, even if we comply with all deadlines and requirements, we may not be able to issue patents in relevant jurisdictions, and furthermore cannot predict whether any patents that might issue will provide us with any competitive advantage.

As of September 30, 2020, we own two issued patents in the United States relating to OP-1250. These patents claim the OP-1250 compound, pharmaceutical compositions that include OP-1250, and certain methods of using OP-1250, including in treatment which may involve combination therapy; the 20-year term for these patents expires in 2036; neither one of these patents was awarded any PTA and it is uncertain whether any PTE will be available, and if so, how much. A related U.S. application remains pending, and applications are also pending in 17 ex-U.S. jurisdictions, including certain major market countries such as Australia, Canada, China, Europe and Japan. Two additional unpublished applications are pending, relating to certain dosing regimens or treatment of particular cancers or patient populations, and one of these is at the PCT stage, and one is a U.S. provisional application.

Certain patents related to OP-1250 may be eligible for PTE in certain jurisdictions, including the United States and Europe, upon approval of a commercial use of the corresponding product by a regulatory agency in the

jurisdiction where the patent was granted. However, there can be no assurance that we will receive or benefit from any PTE with respect to such patents.

In addition to patent term extension regulatory exclusivities, pharmaceutical marketing approval agencies such as the FDA and the European Medicines Agency, or the EMA, offer certain data exclusivities for first-approved products with a new chemical entity, or NCE, exclusivity, and/or for approvals related to orphan indications, or Orphan Drug designation, and/or pediatric approvals, or Pediatric Exclusivity.

Furthermore, as OP-1250 has not previously been approved in the United States for any indication, OP-1250 may be eligible for five years of NCE exclusivity upon its first approval. Should that approval be for an orphan indication for which we have received Orphan Drug designation, the NCE and Orphan Drug exclusivity would run concurrently.

With respect to our owned intellectual property, we cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any current patents or any patents that may be granted to us in the future will be commercially useful in protecting OP-1250 or any future product candidates and the methods used to manufacture them. Moreover, any issued patents and those that may issue in the future may not guarantee us the right to practice our technology in relation to the commercialization of OP-1250 or any future product candidates. Any patents and those that may issue in the future may be challenged, narrowed, circumvented or invalidated, which could limit our ability to stop competitors from marketing related product candidates or limit the length of the term of patent protection that we may have for OP-1250 or any future product candidates. In addition, the rights granted under any issued patents may not provide us with complete protection or competitive advantages against competitors with similar products to ours. For information regarding risks related to intellectual property, please see the section titled "Risk Factors—Risks Related to Our Intellectual Property."

We have also applied to register the "Olema," "Olema Oncology," and "Olema Therapeutics" trademarks with the USPTO. We do not currently own any U.S. registered trademarks for our brand or trade names. Our trademarks or trade names may be challenged, infringed, circumvented, or declared generic or determined to be infringing on other marks. 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 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. 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 secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

In addition to patent, regulatory exclusivity, and trademark, we rely on trade secret and know-how protection to secure our proprietary position around our chemistry, technology and other discoveries and inventions that we consider important to our business.

We also seek to protect our intellectual property, including our trade secrets and know-how, in part by entering into confidentiality agreements with companies with whom we share proprietary and confidential information in the course of business discussions, and by having confidentiality terms in our agreements with our employees, consultants, scientific advisors, clinical investigators and other contractors and also by requiring our employees, commercial contractors, and certain consultants and investigators, to enter into invention assignment agreements that grant us ownership of any discoveries or inventions made by them while in our employ. However, trade secrets and know-how can be difficult to protect. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes or that these agreements will afford us adequate protection of our intellectual property and

proprietary rights. Despite these 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. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. For information regarding risks related to intellectual property, please see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

Sales and marketing

Given our stage of development, we have not yet established a commercial organization or distribution capabilities. We intend to build a commercial infrastructure to support sales of any approved products. We intend to continue evaluating opportunities to work with partners that enhance our capabilities with respect to the development and commercialization of OP-1250. In addition, we intend to commercialize our product candidates, if approved, in key markets either alone or with partners in order to maximize the worldwide commercial potential of our programs.

Manufacturing

We currently do not own or operate any manufacturing facilities. We rely, and expect to continue to rely for the foreseeable future, on third-party contract manufacturing organizations, or CMOs, to produce OP-1250 for nonclinical and clinical testing, as well as for commercial manufacture if OP-1250 receives marketing approval. We require that our CMOs produce bulk drug substances and finished drug products in accordance with current Good Manufacturing Practices, or cGMPs, and all other applicable laws and regulations. We maintain agreements with our manufacturers that include confidentiality and intellectual property provisions to protect our proprietary rights related to OP-1250.

We have engaged CMOs to manufacture and package OP-1250 for nonclinical and clinical use. Additional CMOs are used to label and distribute OP-1250 for clinical use. We obtain our supplies from these CMOs on a purchase order basis and do not have long-term supply arrangements in place. Although we do not currently have contractual arrangements in place for redundant supply for OP-1250, it is our goal to identify and contract with at least two manufacturers for active pharmaceutical ingredient and two manufacturers for drug product. More broadly, for OP-1250 and any other product candidates we may develop, we intend to identify and qualify additional manufacturers to provide the active pharmaceutical ingredient and fill-and-finish services prior to seeking regulatory approval.

Competition

The biotechnology and pharmaceutical industries are characterized by rapid technological advancement, significant competition and an emphasis on intellectual property. We face potential competition from many different sources, including major and specialty pharmaceutical and biotechnology companies, academic research institutions, governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize will compete with current therapies and new therapies that may become available in the future.

Many of the companies against which we may compete have significantly greater financial resources and expertise in research and development, manufacturing, nonclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical, biotechnology and oncology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

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 less

expensive than any products we may develop. Our competitors also may obtain FDA or other regulatory approval for their product candidates more rapidly than we may obtain approval for ours, which could result in competitors establishing a strong market position before we are able to enter the market. We believe that the key competitive factors affecting the success of any of our product candidates, if approved, will include efficacy, combinability, safety profile, convenience, cost, level of promotional activity devoted to them and intellectual property protection.

If the product candidates for our priority programs are approved for the indications we are currently targeting, they will compete with the products discussed below. Furthermore, it is possible that other companies are also engaged in discovery or nonclinical development of product candidates for the same indications. These competitors, if successful in clinical development, may achieve regulatory approval and market adoption in advance of our product candidates, constraining our ability to gain significant market share for such product candidates. In addition, our product candidates, if approved, will compete with multiple approved products or products that may be approved for future indications for which we develop such product candidate.

There are several currently marketed drugs and product candidates currently in development for the treatment of ER+ breast cancer that may compete with OP-1250 if approved, including: certain CERAN therapies, such as RG6171 being developed by Roche Holding AG/Genentech, Inc., fulvestrant, marketed as Faslodex® by AstraZeneca PLC, or any generic equivalents of Faslodex® that may be developed, AZD9833 being developed by AstraZeneca PLC, SAR439859 being developed by Sanofi S.A. and LY3484356 being developed by Eli Lilly and Co.; companies that develop or produce SERD or non-CERAN SERD therapies, such as ZN-c5 being developed by Zentalis Pharmaceuticals, Inc., elacestrant being developed by Radius Health, Inc., ARV-471 being developed by Arvinas, Inc., rintodestrant (G1T48) being developed by G1 Therapeutics, Inc. and H3B-6545 being developed by H3 Biomedicines, a subsidiary of Eisai Co., Ltd.

Government regulation and product approval

As a biopharmaceutical company that operates in the United States, we are subject to extensive regulation. Government authorities in the United States (at the federal, state and local level) and in other countries extensively regulate, among other things, the research, development, testing, manufacturing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug products such as those we are developing. Any drug candidates that we develop must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way, but country-specific regulation remains essential in many respects.

U.S. Drug development process

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. Drugs are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of extensive nonclinical laboratory tests, nonclinical animal studies and formulation studies in accordance with applicable regulations, including the FDA's Good Laboratory Practices, or GLP, regulations and other applicable regulations;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with applicable regulations, including the FDA's current good clinical practice, or GCP, regulations to establish the safety and efficacy of the proposed drug for its proposed indication;
- submission to the FDA of a New Drug Application, or NDA, for a new drug;
- a determination by the FDA within 60 days of its receipt of an NDA to file the NDA for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities where the drug is produced to assess compliance with the FDA's current good manufacturing practice, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the nonclinical and/or clinical trial sites that generated the data in support of the NDA;
- satisfactory completion of an FDA advisory committee review, if applicable; and
- FDA review and approval of the NDA prior to any commercial marketing or sale of the drug in the United States.

Before testing any compounds with potential therapeutic value in humans, the drug candidate enters the nonclinical testing stage. Nonclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies, to assess the characteristics and potential safety and activity of the drug candidate. The conduct of the nonclinical tests must comply with federal regulations and requirements including GLPs. The sponsor must submit the results of the nonclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human trials. Some nonclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials and places the IND on clinical hold within that 30-day time period. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. The FDA may also impose clinical holds on a drug candidate at any time before or during clinical trials due to safety concerns or non-compliance.

For each successive clinical trial conducted with the investigational drug, a separate, new protocol submission to an existing IND must be made, along with any subsequent changes to the investigational plan. Sponsors are also subject to ongoing reporting requirements, including submission of IND safety reports for any serious adverse experiences associated with use of the investigational drug or findings from nonclinical studies suggesting a significant risk for human subjects, as well as IND annual reports on the progress of the investigations conducted under the IND.

Clinical trials involve the administration of the drug candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent

amendments to the protocol, must be submitted to the FDA as part of the IND. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion, the side effects associated with increasing doses and if possible, to gain early evidence of effectiveness. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- *Phase 2.* The drug is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases or conditions and to determine dosage tolerance, optimal dosage and dosing schedule.
- *Phase 3.* Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall benefit/risk ratio of the product and provide an adequate basis for product approval. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA.

Post-approval studies, or Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, FDA may mandate the performance of Phase 4 trials. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events or any finding from tests in laboratory animals that suggests a significant risk for human subjects. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA, the IRB, or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical 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 to certain data from the trial.

Concurrent with clinical trials, companies usually 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, must develop methods for testing the identity, strength, quality and purity 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.

U.S. Review and approval processes

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials, along with descriptions of the

manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. Data may come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational drug product to the satisfaction of the FDA. The submission of an NDA is subject to the payment of substantial user fees; a waiver of such fees may be obtained under certain limited circumstances.

In addition, the Pediatric Research Equity Act, or PREA, requires a sponsor to conduct pediatric clinical trials for most drugs, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original NDAs and supplements must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must evaluate the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric clinical trials for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug is ready for approval for use in adults before pediatric clinical trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric clinical trials begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation. Unless otherwise required by regulation, the Pediatric Research Equity Act does not apply to any drug for an indication for which orphan designation has been granted. However, if only one indication for a product has orphan designation, a pediatric assessment may still be required for any applications to market that same product for the non-orphan indication(s).

The FDA reviews all NDAs submitted before it accepts them for filing and may request additional information rather than accepting an NDA for filing. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the Prescription Drug User Fee Act, or PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the date of "filing" of a standard NDA for a new molecular entity to review and act on the submission. This review typically takes twelve months from the date the NDA is submitted to the FDA because the FDA has approximately two months to make a "filing" decision after it the application is submitted. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs, and the review process is often significantly extended by FDA requests for additional information or clarification.

After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and 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 and typically follows the advisory committee's recommendations.

Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product 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. Additionally, before approving an NDA, the FDA may inspect one or more clinical sites to assure compliance with GCP requirements. After the FDA evaluates the application, manufacturing process and manufacturing facilities, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The Complete Response Letter may require additional clinical data and/or (an) additional pivotal Phase 3 clinical

trial(s), and/or other significant and time-consuming requirements related to clinical trials, nonclinical studies or manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling or may condition the approval of the NDA on other changes to the proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. For example, the FDA may require Phase 4 testing, which involves clinical trials designed to further assess a drug safety and effectiveness, and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. The FDA may also determine that a risk evaluation and mitigation strategy, or REMS, is necessary to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without an approved REMS, if required. A REMS could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Orphan drug designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States or, if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making a drug product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting an NDA. After the FDA grants orphan designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity or inability to manufacture the product in sufficient quantities. The designation of such drug also entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If an orphan designated product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan exclusivity. Orphan drug status in the European Union has similar but not identical benefits in that jurisdiction.

Expedited development and review programs

The FDA has a fast track designation program that is intended to expedite or facilitate the process for reviewing new drug products that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Unique to a fast track product, the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and

determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

Any product submitted to the FDA for approval, including a product with a fast track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide safe and effective therapy for a serious condition where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a serious condition compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug designated for priority review in an effort to facilitate the review.

In addition, a product may be eligible for accelerated approval. Drug products intended to treat serious or life-threatening diseases or conditions may be eligible for accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

A sponsor may seek FDA designation of a drug candidate as a "breakthrough therapy" if the drug 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 existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes intensive FDA interaction and guidance. If a drug is designated as breakthrough therapy, FDA will expedite the development and review of such drug. Breakthrough therapy designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance. The breakthrough therapy designation is a distinct status from both accelerated approval and priority review, which can also be granted to the same drug if relevant criteria are met. If a product is designated as breakthrough therapy, the FDA will work to expedite the development and review of such drug.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. In addition, this designation may not provide a material commercial advantage.

Post-approval requirements

Any drug products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), limitations on industry-sponsored scientific and educational activities, and requirements for promotional activities involving the internet. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the long term stability of the drug product. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. cGMP regulations require among other things, quality control and quality

assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA, including, among other things, recall or withdrawal of the product from the market. In addition, changes to the manufacturing process are strictly regulated, and depending on the significance of the change, may require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, and surveillance to monitor the effects of an approved product. Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, warning letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

U.S. Patent term restoration and marketing exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents, if granted, may be eligible for limited PTE under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. As compensation for patent term lost during product development and the FDA regulatory review process, the Hatch-Waxman Amendments permit a patent restoration term, or PTE, which is limited to a maximum of five years, or less if the extended patent term would exceed 14 years after the date of the regulatory approval of the product. The patent term restoration period is generally 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 approval of that application. Only one patent applicable to an approved drug or drug product, or its approved use, is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of a patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA. However, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. There can be no assurance that we will benefit from any PTE or favorable adjustment to the term of any of our patents.

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain marketing applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted

after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the nonclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Orphan drug exclusivity, as described above, may offer a seven-year period of marketing exclusivity, except in certain circumstances. Pediatric exclusivity is another type of non-patent market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Other U.S. Healthcare laws and compliance requirements

Although we currently do not have any products on the market, we are and, upon approval and commercialization, will be subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which we conduct our business. In the United States, such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security, price reporting, and provider transparency laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor.

Additionally, the intent standard under the Anti-Kickback Statute and the criminal healthcare fraud statutes (discussed below) was amended by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, together with subsequent amendments and regulations, collectively, the ACA, to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law 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 federal False Claims Act (discussed below).

The federal False Claims Act prohibits, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the

federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. Pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product and for causing false claims to be submitted because of the companies’ marketing of the product for unapproved, and thus non-covered, uses.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, also created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Additionally, the federal Physician Payments Sunshine Act within the ACA, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) annually report information related to certain payments or other transfers of value made or distributed to physicians, certain other healthcare providers and teaching hospitals, certain ownership and investment interests held by these healthcare providers and their immediate family members.

We may also be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, impose requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA’s privacy and security standards directly applicable to business associates, independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four 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. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

We also are or will become subject to privacy laws in the jurisdictions in which we are established or in which we sell or market our products or run clinical trials. For example, in Europe we are subject to Regulation (EU) 2016/679, the General Data Protection Regulation, or GDPR, in relation to our collection, control, processing and other use of personal data (i.e. data relating to an identifiable living individual). We process personal data in relation to participants in our clinical trials in the European Economic Area, or EEA, including the health and medical information of these participants. The GDPR is directly applicable in each European Union Member State, however, it provides that European Union Member States may introduce further conditions, including limitations which could limit our ability to collect, use and share personal data (including health and medical information), or could cause our compliance costs to increase, ultimately having an adverse impact on our business.

The GDPR imposes onerous accountability obligations requiring data controllers and processors to maintain a record of their data processing and implement policies as part of its mandated privacy governance framework. It also requires data controllers to be transparent and disclose to data subjects (in a concise, intelligible and easily accessible form) how their personal information is to be used, imposes limitations on retention of personal data; defines pseudonymized (i.e., key-coded) data; introduces mandatory data breach notification requirements; and sets higher standards for data controllers to demonstrate that they have obtained valid consent for certain data processing activities. We are subject to the supervision of local data protection authorities in those European

Union jurisdictions where we are established or otherwise subject to the GDPR. Fines for certain breaches of the GDPR are significant: up to the greater of €20 million or 4% of total global annual turnover. Further, following the withdrawal of the United Kingdom from the European Union on January 31, 2020, pursuant to the transitional arrangements agreed between the United Kingdom and the European Union, we will have to comply with the GDPR and separately the GDPR as implemented in the United Kingdom, each regime having the ability to fine up to the greater of €20 million/ £17 million or 4% of global turnover. The relationship between the United Kingdom and the European Union in relation to certain aspects of data protection law remains unclear, including how data transfers between European Union member states and the United Kingdom will be treated. These changes may lead to additional compliance costs and could increase our overall risk. In addition to the foregoing, a breach of the GDPR or other applicable privacy and data protection laws and regulations could result in regulatory investigations, reputational damage, orders to cease/change our use of data, enforcement notices, or potential civil claims including class action type litigation.

In addition, the GDPR includes restrictions on cross-border data transfers. Certain aspects of cross-border data transfers under the GDPR are uncertain as the result of legal proceedings in the European Union, including a recent decision by the Court of Justice for the European Union that invalidated the EU-U.S. Privacy Shield and, to some extent, called into question the efficacy and legality of using standard contract clauses. This may increase the complexity of transferring personal data across borders. The GDPR will increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. We are also subject to European Union rules with respect to cross-border transfers of personal data out of the European Union and EEA. Recent legal developments in the European Union have created complexity and uncertainty regarding transfers of personal data from the EEA to the United States. On July 16, 2020, the Court of Justice of the European Union, or CJEU, invalidated the EU-US Privacy Shield Framework, or Privacy Shield, under which personal data could be transferred from the EEA to US entities who had self-certified under the Privacy Shield scheme. While the CJEU upheld the adequacy, subject to certain conditions, of the standard contractual clauses (a standard form of contract approved by the European Commission as an adequate personal data transfer mechanism), future regulatory guidance could result in changes to the use of standard contractual clauses. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the standard contractual clauses cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results.

Further, the vote in the United Kingdom in favor of exiting the European Union, referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. Specifically, while the Data Protection Act of 2018, which “implements” and complements the GDPR achieved Royal Assent on May 23, 2018 and is now effective in the United Kingdom, aspects of data protection in the United Kingdom, such as the transfer of data from the EEA to the United Kingdom, remain uncertain. During the period of “transition” (i.e., until December 31, 2020), European Union law will continue to apply in the United Kingdom, including the GDPR, after which the GDPR will be converted into United Kingdom law. Beginning in 2021, the United Kingdom will be a “third country” under the GDPR.

In addition, California recently enacted the California Consumer Privacy Act, or CCPA, which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling certain personal data of consumers or households. The CCPA requires covered companies to provide new disclosure to consumers about such companies’ data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. The CCPA became effective on January 1, 2020, and (a) allows enforcement by the California Attorney General, with fines

set at \$2,500 per violation (i.e., per person) or \$7,500 per intentional violation and (b) authorizes private lawsuits to recover statutory damages for certain data breaches. In addition, laws in all 50 U.S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U.S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted. The CCPA may impact our business activities and exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information. Additionally, a new privacy law, the California Privacy Rights Act, or CPRA, recently was certified by the California Secretary of State to appear on the ballot for the November 3, 2020 election. If this initiative is approved by California voters, the CPRA would significantly modify the CCPA, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, track and report gifts, compensation and other remuneration made to physicians and other healthcare providers, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private “qui tam” actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. For information regarding risks related to these compliance requirements, please see the section titled “Risk Factors—Risks Related to Regulatory Approval and Other Legal Compliance Matters.”

Pharmaceutical coverage, pricing and reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we or our collaborators obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we or our collaborators receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage, and establish adequate reimbursement levels for such drug products. In the United States, third-party payors include federal and state healthcare programs, government authorities, private managed care providers, private health insurers and other organizations. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of medical drug products and medical services, in addition to questioning their safety and efficacy. Such payors may limit coverage to specific drug products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs for a particular indication. We or our collaborators may need to conduct expensive pharmaco-economic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Nonetheless, our product candidates may not be considered medically necessary or cost-effective. Moreover, the process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price of a drug product or for establishing the reimbursement rate that such a payor will

pay for the drug product. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

If we elect to participate in certain governmental programs, we may be required to participate in discount and rebate programs, which may result in prices for our future products that will likely be lower than the prices we might otherwise obtain. For example, drug manufacturers participating under the Medicaid Drug Rebate Program must pay rebates on prescription drugs to state Medicaid programs. Under the Veterans Health Care Act, or VHCA, drug companies are required to offer certain drugs at a reduced price to a number of federal agencies, including the U.S. Department of Veterans Affairs and Department of Defense, the Public Health Service and certain private Public Health Service designated entities in order to participate in other federal funding programs, including Medicare and Medicaid. Recent legislative changes require that discounted prices be offered for certain U.S. Department of Defense purchases for its TRICARE program via a rebate system. Participation under the VHCA also requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations. If our products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply.

Different pricing and reimbursement schemes exist in other countries. In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular drug candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any product candidates for which we or our collaborators receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products and services, implementing reductions in Medicare and other healthcare funding and applying new payment methodologies. For example, in March 2010, the ACA was enacted, which affected existing government healthcare programs and resulted in the development of new programs.

Among the Affordable Care Act's provisions of importance to the pharmaceutical industry, in addition to those otherwise described above, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs;

- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively, and a cap on the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price, or AMP;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals, including individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. For example, the Tax Cuts and Jobs Act, or the Tax Act was enacted, which includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas ruled that the individual mandate is a critical and inseparable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. Additionally, on December 18, 2019, the U.S. Court of Appeals for the 5th Circuit ruled that that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review this case, and has allotted one hour for oral arguments, which are expected to occur in the fall. It is unclear how this litigation and other efforts to repeal and replace the ACA will impact the ACA and our business.

Other legislative changes have also been proposed and adopted in the United States since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, included aggregate reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013. The Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, which was signed into law in March 2020 and is designed to provide financial support and resources to individuals and businesses affected by the COVID-19 pandemic, suspended the 2% Medicare sequester from May 1, 2020 through December 31, 2020 and extended the sequester by one year, through 2030. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There has been heightened governmental scrutiny recently over the manner in which pharmaceutical companies set prices for their marketed products, which has resulted in several Congressional inquiries and proposed federal legislation, as well as state efforts, designed to, among other things, bring more transparency to product 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 drug products. The Trump administration's budget proposal for fiscal year 2021 includes a \$135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. In addition, on March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would,

among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly out-of-pocket expenses, and place limits on pharmaceutical price increases. Further, the Trump administration previously released a “Blueprint” to lower drug prices and reduce out of pocket costs of drugs that contained proposals to increase drug manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products, and reduce the out of pocket costs of drug products paid by consumers. The Department of Health and Human Services, or HHS, has solicited feedback on some of these measures and has implemented others under its existing authority. On July 24, 2020, President Trump announced four executive orders related to prescription drug pricing that attempt to implement several of the Administration’s proposals, including a policy that would tie Medicare Part B drug prices to international drug prices; one that directs HHS to finalize the Canadian drug importation proposed rule previously issued by HHS and makes other changes allowing for personal importation of drugs from Canada; one that directs HHS to finalize the rulemaking process on modifying the anti-kickback law safe harbors for plans, pharmacies, and pharmaceutical benefit managers; and one that reduces costs of insulin and epipens to patients of federally qualified health centers. While some of these and other measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented 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.

We anticipate that these new laws will result in additional downward pressure on coverage and the price that we receive for any approved product, and could seriously harm our business. Any reduction in reimbursement from Medicare and 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 products (if approved). In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition, and results of operations. For example, it is possible that additional governmental action is taken to address the COVID-19 pandemic.

The U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act of 1977, or FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Europe / rest of world government regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we or our potential collaborators obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application, or CTA, must be submitted to each country’s national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country’s requirements, clinical trial development may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug or biological product under European Union regulatory systems, we must submit a marketing authorization application either under the so-called centralized or national authorization procedures.

Centralized procedure. The centralized procedure provides for the grant of a single marketing authorization following a favorable opinion by the EMA that is valid in all European Union member states, as well as Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for medicines produced by specified biotechnological processes, products designated as orphan medicinal products, and products with a new active substance indicated for the treatment of specified diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions. The centralized procedure is optional for products that represent a significant therapeutic, scientific or technical innovation, or whose authorization would be in the interest of public health.

National authorization procedures. There are also two other possible routes to authorize medicinal products in several European Union countries, which are available for investigational medicinal products that fall outside the scope of the centralized procedure:

- *Decentralized procedure.* Using the decentralized procedure, an applicant may apply for simultaneous authorizations in more than one European Union country of medicinal products that have not yet been authorized in any European Union Member State and that do not fall within the mandatory scope of the centralized procedure.
- *Mutual recognition procedure.* In the mutual recognition procedure, a medicine is first authorized in one European Union Member State, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other European Union countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization.

The EMA grants orphan drug designation to promote the development of products that may offer therapeutic benefits for life-threatening or chronically debilitating conditions affecting not more than five in 10,000 people in the European Union. In addition, orphan drug designation can be granted if the drug is intended for a life threatening, seriously debilitating or serious and chronic condition in the European Union and without incentives it is unlikely that sales of the drug in the European Union would be sufficient to justify developing the drug. Orphan drug designation is only available if there is no other satisfactory method approved in the European Union of diagnosing, preventing or treating the condition, or if such a method exists, the proposed orphan drug will be of significant benefit to patients. Orphan drug designation provides opportunities for free protocol assistance, fee reductions for access to the centralized regulatory procedures and ten years of market exclusivity following drug approval, which can be extended to 12 years if trials are conducted in accordance with an agreed-upon pediatric investigational plan. The exclusivity period may be reduced to six years if the designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we or our potential collaborators fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Employees

As of October 15, 2020, we had 10 employees, all of whom were full-time, consisting of clinical, research, operations, regulatory, finance and business development personnel. Six of our employees hold Ph.D. or M.D. degrees. None of our employees is subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

Facilities

Our corporate headquarters are located in San Francisco, California, where we lease approximately 3,500 square feet of office space pursuant to a lease agreement which commenced on September 1, 2020 and expires on August 31, 2022. We believe that these existing facilities will be adequate for our near-term needs. If required, we believe that suitable additional or alternative space would be available in the future on commercially reasonable terms.

Legal proceedings

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not currently a party to any material legal proceedings. Regardless of outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Management

Executive officers, directors and key consultant

The following table sets forth information regarding our executive officers, directors and key consultant as of October 23, 2020.

| Name | Age | Position |
|---|-----|---|
| <i>Executive Officers:</i> | | |
| Sean Bohan, M.D., Ph.D. | 54 | President, Chief Executive Officer and Director |
| Cyrus L. Harmon, Ph.D. | 50 | Chief Technology Officer and Director |
| Peter J. Kushner, Ph.D. | 82 | Chief Scientific Officer |
| David C. Myles, Ph.D. | 58 | Chief Development Officer |
| Shane Kovacs | 47 | Chief Operating and Financial Officer |
| Kinney Horn | 46 | Chief Business Officer |
| John B. Moriarty, Jr., J.D. | 53 | Executive Vice President, Chief Legal Officer and Corporate Secretary |
| <i>Non-Employee Directors:</i> | | |
| Ian Clark | 60 | Chairperson of the Board of Directors |
| Cynthia Butitta | 66 | Director |
| Gorjan Hrustanovic, Ph.D. | 31 | Director |
| Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) | 70 | Director |
| Andrew Rappaport | 63 | Director |
| Graham Walmsley, M.D., Ph.D. | 34 | Director |
| <i>Key Consultant:</i> | | |
| Pamela M. Klein, M.D. | 58 | Chief Medical Officer |

(1) Member of the compensation committee.

(2) Member of the nominating and corporate governance committee.

(3) Member of the audit committee.

Executive officers

Sean Bohan, M.D., Ph.D. has served as our Chief Executive Officer and as a member of our board of directors since September 2020. In September of 2020, Dr. Bohan joined Gyroscope Therapeutics, Ltd. as a non-executive director. In August 2019, Dr. Bohan joined AltruBio, Inc. (then AbGenomics, Inc.) as a non-executive director and continues in that role. From September 2015 to April 2019, Dr. Bohan served as the Executive Vice President, Global Medicines Development and Chief Medical Officer at AstraZeneca PLC. From June 2003 to July 2015, he held a number of senior leadership roles at Genentech, Inc., including Senior Vice President, Early Development, Genentech Research and Early Development. Prior to Genentech, Dr. Bohan was a Clinical Instructor in Oncology at Stanford University School of Medicine from October 2002 to December 2011, a research associate at the Howard Hughes Medical Institute from July 2000 to June 2003 and a postdoctoral fellow at the National Cancer Institute from January through December 1995. Dr. Bohan received a B.S. in Bacteriology from the University of Wisconsin-Madison, and a Ph.D. in Biochemistry & Biophysics and M.D. from the University of California, San Francisco. We believe Dr. Bohan is qualified to serve on our board of directors due to his extensive experience in the biopharmaceutical industry as an executive officer, as well as the perspective and experience he brings as our President and Chief Executive Officer.

Cyrus L. Harmon, Ph.D. has served as our Chief Technology Officer since September 2020 and as a member of our board of directors since August 2006. Dr. Harmon is one of our co-founders, and he served as our President and Chief Executive Officer from March 2007 to September 2020. From 2000 to 2002, Dr. Harmon served as the

Vice President of Computational Genomics and General Manager at Affymetrix, Inc., later acquired by Thermo Fisher Scientific in 2016. From 1996 to 2000, Dr. Harmon founded and served as the Chief Executive Officer of Neomorphic, Inc., a computational biology company, before it was acquired by Affymetrix, Inc. Dr. Harmon received a B.A. and Ph.D. in molecular and cell biology from the University of California, Berkeley. We believe that Dr. Harmon is qualified to serve on our board of directors due to his extensive training as a scientist, significant knowledge and experience with respect to the biotechnology and pharmaceutical industries, and the perspective and experience he brings as one of our co-founders and executive officers.

Peter J. Kushner, Ph.D. has served as our Chief Scientific Officer since March 2007, as a member of our board of directors since August 2006 and is one of our co-founders. He is also Professor Emeritus at the University of California, San Francisco, in the Department of Medicine, an association that began in 1986. From 1985 to 1986 he was a senior scientist at California Biotechnology. Dr. Kushner also co-founded Serra Pharmaceuticals, Inc. in 1996, which was acquired by Karo Bio (now Karo Pharma), and served on the board of directors of Karo Bio until 2004. Dr. Kushner received a B.A. from Dartmouth College in mathematics honors and philosophy, and his Ph.D. in molecular biology from the Institute of Molecular Biology and Department of Biology at the University of Oregon in 1979. He was a post-doctoral fellow and Howard Hughes Research Associate at the University of California, San Francisco, in the Department of Biochemistry and Biophysics.

David C. Myles, Ph.D. has served as our Chief Development Officer since June 2020. Prior to that, he served as our Executive Vice President, Drug Discovery and Development beginning in April 2008. From 2006 to 2008, Dr. Myles co-founded and served as the Chief Operating Officer of Epiphany Biosciences, Inc. From January 2006 to November 2007, he served as the Executive Director of Chemistry at Kosan Biosciences, Inc. From 1998 to 2001, Dr. Myles served as the Associate Director of Medical Chemistry at Chiron Corporation, a biotechnology company that was later acquired by Novartis International AG. From 1991 to 1998, he was an Assistant Professor in the Department of Chemistry and Biochemistry at University of California, Los Angeles. Dr. Myles currently serves as the Finance Chair on Board of Directors of Point Blue. Dr. Myles received a B.A. in chemistry from Occidental College, and his Ph.D. in chemistry from Yale University. He was a National Institute of Health post-doctoral fellow at Harvard University.

Shane Kovacs has served as our Chief Operating and Financial Officer since June 2020. Prior to joining us, Mr. Kovacs served as Chief Business and Financial Officer at BlueRock Therapeutics LP from September 2018 to March 2020. Mr. Kovacs served as Managing Director, Head of Biotechnology Investment Banking at RBC Capital Markets from May 2017 to September 2018. From June 2013 to May 2017, Mr. Kovacs served in various positions at PTC Therapeutics, Inc., including Executive Vice President, Chief Financial Officer; Head of Corporate Development; and director of PTC Therapeutics International Limited, an indirect wholly owned subsidiary of PTC Therapeutics, Inc. From March 2004 to May 2013, Mr. Kovacs served in various positions at Credit Suisse, including Managing Director, Healthcare Investment Banking. Mr. Kovacs received a B.Eng. in chemical engineering and a B.S. in life sciences from Queen's University and an M.B.A. from the University of Western Ontario.

Kinney Horn has served as our Chief Business Officer since May 2020. From May 2019 to April 2020, Mr. Horn was an Entrepreneur in Residence at EcoR1 Capital, an investment advisory firm focused on biotechnology. From January 2003 to April 2019, Mr. Horn served as the Director of Business Development at Genentech, Inc. Prior to Genentech, Mr. Horn served in various investment banking and venture capital roles from 1998 to 2003. Mr. Horn received a B.A. in economics and international affairs from University of Mary Washington and an M.S. in biochemistry from Georgetown University.

John B. Moriarty, Jr., J.D. has served as our Executive Vice President, Chief Legal Officer and Corporate Secretary since September 2020. From March 2018 to July 2020, he served as Executive Vice President, General Counsel and Secretary at Portola Pharmaceuticals, Inc., which was acquired by Alexion Pharmaceuticals, Inc. in July 2020. From September 2014 to February 2018, Mr. Moriarty served as Executive Vice President and General Counsel of Alexion Pharmaceuticals, Inc., and from December 2012 to September 2014, he served as Senior Vice President and General Counsel of Alexion. Prior to joining Alexion in December 2012, he served as General Counsel and Chief Legal Officer at Elan Corporation plc, an Irish public limited company traded on the New York and Irish Stock Exchanges, and also served as a member of Elan's Executive Management team from March 2010 to

December 2012. Prior to assuming the role of General Counsel and Chief Legal Officer, Mr. Moriarty served as Senior Vice President of Law, Litigation and Commercial Operations at Elan from December 2008 to March 2010. From 2002 to 2008, Mr. Moriarty held various positions with Amgen Inc., including Executive Director and Associate General Counsel, Global Commercial Operations—Amgen Oncology and Senior Counsel, Complex Litigation, Products Liability and Government Investigations. From 1994 and 2002, Mr. Moriarty served in various capacities in private practice focused on healthcare and as a healthcare fraud prosecutor in the U.S. Attorney's Office and the Virginia Attorney General's Office. Mr. Moriarty received a B.A. from the University of Virginia and J.D. from the University of Georgia School of Law.

Non-employee directors

Andrew Rappaport has served as a member of our board of directors since January 2013. Mr. Rappaport has served as the Managing Partner at Skyline Public Works, LLC, his family office, since 2003, and as the Managing Partner and Chief Investment Officer of SPW Investments, his family investment vehicle since 2005. Between 1996 and 2014, Mr. Rappaport was a partner at August Capital, a leading technology venture capital firm. Prior to August Capital, he was the President of the Technology Research Group, a global strategy consulting firm he founded in 1984. We believe Mr. Rappaport is qualified to serve on our board of directors due to his investment experience in the technology industry and his deep knowledge of our company.

Cynthia Butitta has served as a member of our board of directors since August 2020. Ms. Butitta served as the Chief Operating Officer of Kite Pharma Inc., a biopharmaceutical company, from March 2014 to September 2017 and as its Executive Vice President and Chief Financial Officer from January 2014 to May 2016. From May 2011 to December 2012, she was Senior Vice President and Chief Financial Officer at NextWave Pharmaceuticals, Inc., a specialty pharmaceutical company. Prior to that, Ms. Butitta served as Chief Operating Officer of Telik, Inc., a biopharmaceutical company, from March 2001 to December 2010 and as its Chief Financial Officer from August 1998 to December 2010. Ms. Butitta also served as Principal Accounting Officer of Telik, Inc. until December 2010. She has served as a member of the board of directors of Autolus Therapeutics plc and UroGen Pharma Ltd., both publicly traded biopharmaceutical companies, since March 2018 and October 2017, respectively. Ms. Butitta received a B.S. with honors in business and accounting from Edgewood College in Madison, Wisconsin and an M.B.A. in finance from the University of Wisconsin, Madison. We believe Ms. Butitta is qualified to serve on our board of directors due to her extensive executive experience in the biopharmaceutical industry.

Ian Clark has served as a member of our board of directors since August 2020. From September 2017 to September 2020, Mr. Clark was an Operating Partner at Blackstone Life Sciences, formerly Clarus Ventures, LLC, a venture capital firm. Mr. Clark has served as a member of the boards of directors of publicly traded biopharmaceutical companies Takeda Pharmaceutical Company Limited since January 2019, AVROBIO, Inc. since January 2018, Corvus Pharmaceuticals, Inc. since January 2017, Guardant Health, Inc. since January 2017 and Agios Pharmaceuticals, Inc. since December 2016. Mr. Clark served as a member of the board of directors of publicly traded biopharmaceutical companies Forty Seven Inc. from May 2018 to April 2020, and Shire Pharmaceuticals, Inc. from February 2017 to January 2019. He also served as a member of the board of directors of Kite Pharma, Inc., then a publicly traded biopharmaceutical company, from January 2017 to October 2017. He served as Chief Executive Officer of Genentech, Inc. from January 2010 to December 2016. Prior to that, he was the Executive Vice President and Chief Marketing Officer of the Roche Group from April 2009 to December 2009. Prior to Roche Group, Mr. Clark held several senior management positions at Genentech from January 2003 to March 2009, including Head of Global Product Strategy, Chief Marketing Officer, Senior Vice President, General Manager of BioOncology and Executive Vice President, Commercial Operations. Prior to Genentech, Mr. Clark spent 23 years in the biopharmaceutical industry in senior roles at Novartis International AG, Ivax Pharmaceuticals, Inc. and Sanofi S.A. in the United Kingdom, France and Eastern Europe. He started his career at G.D. Searle, LLC, a subsidiary of Monsanto Corporation, holding positions in sales and marketing. Mr. Clark received a B.S. in biology from Southampton University. We believe Mr. Clark is qualified to serve on our board of directors due to his extensive experience in the biopharmaceutical industry, both as an executive officer and as a director of multiple public and private companies.

Gorjan Hrutanovic, Ph.D. has served as a member of our board of directors since July 2018. Dr. Hrutanovic has served as a Principal at BVF Partners L.P. since July 2018 and as an Analyst from September 2015 to July 2018. Dr. Hrutanovic also serves as a member of the boards of directors of Kymera Therapeutics Inc., a publicly traded biopharmaceutical company, a position he has held since March 2020, and a number of privately held companies, including Rain Therapeutics Inc. Dr. Hrutanovic received a B.S. in molecular biology and a B.S. in management science from the University of California, San Diego, and his Ph.D. in cancer biology & cell signaling from the University of California, San Francisco. We believe Dr. Hrutanovic is qualified to serve on our board of directors due to his experience in the life sciences industry as a venture capitalist and a director.

Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) has served as a member of our board of directors since December 2014. Dr. McCormick has served as the Chairman of Oncology at BridgeBio Pharma, Inc. since April 2019. He has held the position of Director the University of California, San Francisco Helen Diller Family Comprehensive Cancer Center, a multidisciplinary research and medical care organization and served as Associate Dean of the University of California, San Francisco School of Medicine from 1997 to 2014. Prior to joining the University of California, San Francisco faculty, Dr. McCormick pursued cancer-related work with several biotechnology firms, including Cetus Corporation as Director of Molecular Biology from 1981 to 1990 and Vice President of Research from 1990 to 1991, and Chiron Corporation as Vice President of Research from 1991 to 1992. In 1992, he founded Onyx Pharmaceuticals Inc. and served as its Chief Scientific Officer until 1996. He also served as a member of the board of directors of Aduro Biotech, Inc., a publicly traded biotechnology company, from 2010 to February 2019. Dr. McCormick received his B.Sc. in biochemistry from the University of Birmingham, and his Ph.D. in biochemistry from the University of Cambridge and held postdoctoral fellowships in the U.S. at the State University of New York at Stony Brook and in London at the Imperial Cancer Research Fund. Dr. McCormick is a Fellow of the Royal Society, an institution dedicated to science, since 1996, a member of the National Academy of Sciences since 2014 and has served as President, from 2012 to 2013, for the American Association for Cancer Research. Since 2013, Dr. McCormick has led the National Cancer Institute's Ras Initiative at the Frederick National Laboratories for Cancer Research overseeing the national effort to develop therapies against Ras-driven cancers. We believe Dr. McCormick is qualified to serve on our board of directors due to his scientific expertise and experience as a director of a publicly traded company.

Graham Walmsley, M.D., Ph.D. has served as a member of our board of directors since March 2020. Dr. Walmsley is a Founding Member and has served as a General Partner of Logos Global Management, LP, a biotechnology-focused hedge fund, since August 2019. From July 2016 to August 2019, he served as a Principal at Versant Ventures, a healthcare focused venture capital firm. Dr. Walmsley served as Head of Business Development at Pipeline Therapeutics Inc., a biotechnology company, from April 2018 to December 2018 and as Head of Business Development at Jecure Therapeutics, Inc., a biotechnology company, from June 2017 until its acquisition by Genentech, Inc., a subsidiary of Roche, in November 2018. He has served as a member of the board of directors of Akeru Therapeutics and ALX Oncology Holdings Inc., both publicly traded biotechnology companies, since June 2018 and February 2020, respectively. Dr. Walmsley received a B.A. in molecular and cell biology from the University of California, Berkeley and a Ph.D. and an M.D. in stem cell biology and regenerative medicine from Stanford University School of Medicine. We believe Dr. Walmsley is qualified to serve on our board of directors due to his extensive background in the biotechnology industry and experience as a director of a publicly traded company.

Key consultant

Pamela M. Klein, M.D. has served as our Chief Medical Officer since September 2020 and prior to that served as our acting Chief Medical Officer beginning in December 2018. Dr. Klein founded PMK BioResearch, of which she is a principal, in 2008. Through PMK BioResearch, Dr. Klein has offered strategic consulting in oncology drug development to corporate boards, management teams and the investment community, including consulting for and advising Syndax Pharmaceuticals, Inc. from 2008 to 2015. From 2009 to 2011, she served as Chief Medical Officer of Intellikine, Inc., a privately held pharmaceutical company that was acquired by Takeda Pharmaceuticals Company Limited. From 2001 to 2007, Dr. Klein worked at Genentech, Inc. and held roles of increasing responsibility including Vice President, Development. Prior to Genentech, she spent seven years at the National

Cancer Institute, most recently as co-founder and Research Director of the NCI-Navy Breast Care Center. Dr. Klein has served on the boards of directors of I-Mab, a publicly traded biopharmaceutical company, Spring Bank Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, and argenx SE, a publicly traded biotechnology company, since January 2020, July 2019, and April 2016, respectively, and also serves as a board member of Patrys Limited, a biotechnology company listed on the Australian Securities Exchange. She also serves as a member of various scientific advisory boards. Dr. Klein received a B.A. in biology from California State University, Northridge and an M.D. from Stritch School of Medicine, Loyola University Chicago.

Family relationships

Dr. Kushner is Dr. Harmon's uncle by marriage. There are no other family relationships among any of our executive officers or directors.

Composition of our board of directors

Our business and affairs are organized under the direction of our board of directors, which currently consists of eight members with no vacancies. The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling and direction to our management. Our board of directors meets on a regular basis and additionally as required.

Certain members of our board of directors were elected under the provisions of our Amended and Restated Voting Agreement entered into in September 2020, or the Voting Agreement, which will terminate upon the closing of this offering. Under the terms of our Voting Agreement, the stockholders who are party to the Voting Agreement have agreed to vote their respective shares to elect: (i) one director designated by Biotechnology Value Fund, LP, currently Gorjan Hrustanovic, Ph.D.; (ii) one director designated by Logos Global Management LP, currently Graham Walmsley, M.D., Ph.D.; (iii) one director designated by Biotechnology Value Fund, LP, Logos Global Management LP and Janus Capital Management LLC, currently Cynthia Butitta; (iv) two directors designated by the holders of our common stock, one of whom shall be our then-current Chief Executive Officer, currently Sean Bohan, M.D., Ph.D., and one of whom shall be designated by the majority of then-outstanding shares of our common stock, currently Andrew Rappaport; and (v) the balance of the authorized number of directors, such individuals to be designated by our board of directors with the consent of at least one of the directors designated pursuant to (i), (ii) or (iii) and the consent of one of the directors designated pursuant to (iv), currently Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon), Ian Clark and Cyrus L. Harmon, Ph.D. The Voting Agreement will terminate upon the closing of this offering, and upon the closing of the offering no stockholder will have any special rights regarding the election or designation of the members of our board of directors. Our current directors elected to our board of directors pursuant to the Voting Agreement will continue to serve as directors until their successors are duly elected and qualified by holders of our common stock.

Our board of directors may establish the authorized number of directors from time to time by resolution. In accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- the Class I directors will be _____, _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2021;
- the Class II directors will be _____, _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2022; and
- the Class III directors will be _____ and _____ their terms will expire at the annual meeting of stockholders to be held in 2023.

We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one third of the

directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Director independence

Under the listing requirements and rules of The Nasdaq Stock Market LLC, or the Nasdaq Listing Rules, independent directors must comprise a majority of our board of directors as a listed company within one year of the listing date.

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning her or his background, employment and affiliations, including family relationships, our board of directors has determined that Messrs. Clark and Rappaport, Ms. Butitta, and Drs. Hrustanovic, McCormick and Walmsley, representing six of the eight directors, do not have relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the Nasdaq Listing Rules. Our board of directors has determined that Drs. Bohlen and Harmon, by virtue of their positions as our President and Chief Executive Officer and Chief Technology Officer, respectively, are not independent under applicable rules and regulations of the U.S. Securities and Exchange Commission, or the SEC, and the Nasdaq Listing Rules. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our shares by each non-employee director and the transactions described in the section titled "Certain Relationships and Related Person Transactions."

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. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Each committee intends to adopt a written charter that satisfies the application rules and regulation of the SEC and the Nasdaq Listing Rules, which we will post to our website at www.olema.com upon the closing of this offering. Our board of directors may establish other committees as it deems necessary or appropriate from time to time.

Audit committee

Our audit committee currently consists of Ms. Butitta, Mr. Rappaport, and Dr. Walmsley, each of whom our board of directors has determined satisfies the independence requirements under Nasdaq Listing Rules and Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The chair of our audit committee is Ms. Butitta, who our board of directors has determined is an "audit committee financial expert" within the meaning of SEC regulations. Each member of our audit committee can read and understand fundamental financial statements in accordance with applicable requirements. In arriving at these determinations, the board of directors has examined each audit committee member's scope of experience and the nature of their employment in the corporate finance sector.

The primary purpose of the audit committee is to discharge the responsibilities of our board of directors with respect to our corporate accounting and financial reporting processes, systems of internal control and financial-statement audits, and to oversee our independent registered accounting firm. Specific responsibilities of our audit committee include:

- helping our board of directors oversee our corporate accounting and financial reporting processes;
- managing the selection, engagement, qualifications, independence and performance of a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;

- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing related person transactions;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes our internal quality control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving, or, as permitted, pre-approving, audit and permissible non-audit services to be performed by the independent registered public accounting firm.

Compensation committee

Our compensation committee currently consists of Messrs. Clark and Rappaport and Ms. Butitta. The chair of our compensation committee is Mr. Clark. Our board of directors has determined that each of us is independent under the Nasdaq Listing Rules and as a “non-employee director” as defined in Rule 16b-3 promulgated under the Exchange Act.

The primary purpose of our compensation committee is to discharge the responsibilities of our board of directors in overseeing our compensation policies, plans and programs and to review and determine the compensation to be paid to our executive officers, directors and other senior management, as appropriate. Specific responsibilities of our compensation committee include:

- reviewing and approving the compensation of our chief executive officer, other executive officers and senior management;
- reviewing and recommending to our board of directors the compensation paid to our directors;
- reviewing and approving the compensation arrangements with our executive officers and other senior management;
- administering our equity incentive plans and other benefit programs;
- reviewing, adopting, amending and terminating, incentive compensation and equity plans, severance agreements, profit sharing plans, bonus plans, change-of-control protections and any other compensatory arrangements for our executive officers and other senior management;
- reviewing, evaluating and recommending to our board of directors succession plans for our executive officers; and
- reviewing and establishing general policies relating to compensation and benefits of our employees, including our overall compensation philosophy.

Nominating and corporate governance committee

Our nominating and corporate governance committee consists of Drs. Hrustanovic, McCormick and Walmsley. The chair of our nominating and corporate governance committee is Dr. Hrustanovic. Our board of directors has determined that each member of the nominating and corporate governance committee 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.

Specific responsibilities of our nominating and corporate governance committee include:

- identifying and evaluating candidates, including the nomination of incumbent directors for reelection and nominees recommended by stockholders, to serve on our board of directors;

- considering and making recommendations to our board of directors regarding the composition and chairmanship of the committees of our board of directors;
- instituting plans or programs for the continuing education of our board of directors and orientation of new directors;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- overseeing periodic evaluations of the board of directors' performance, including committees of the board of directors and management.

Code of business conduct and ethics

In connection with this offer, we intend to adopt a written Code of Business Conduct and Ethics that applies to all our employees, officers and directors. This includes our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions. The full text of our Code of Business Conduct and Ethics will be posted on our website at www.olema.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. Information contained on, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only an inactive textual reference.

Compensation committee interlocks and insider participation

None of the members of the compensation committee is currently, or has been at any time, one of our executive officers or employees. None of our executive officers currently serves, or has served during the last calendar year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Non-employee director compensation

During the year ended December 31, 2019, each of the following individuals served on our board of directors as non-employee directors: Marina Bozilenko, Lawrence Fritz, Gorjan Hrustanovic, Ph.D., Andrei Manoliu, Ph.D., Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon), Andrew Rappaport and Peter Schwartz. Our non-employee directors did not earn any compensation in the year ended December 31, 2019. As of December 31, 2019, none of our non-employee directors other than Mr. Fritz, who held an option to purchase 10,000 shares of our common stock, and Dr. McCormick, who held an option to purchase 50,000 shares of our common stock, held any unvested equity awards. Drs. Harmon and Kushner each also served on our board of directors during the year ended December 31, 2019, but neither received any additional compensation for their service as a director. See the section titled "Executive Compensation" for more information regarding the compensation earned by Drs. Harmon and Kushner.

We have reimbursed and will continue to reimburse all of our non-employee directors for their reasonable out-of-pocket expenses incurred in attending board of directors and committee meetings.

Our board of directors adopted a non-employee director compensation policy in _____, 2020 that will become effective in connection with this offering and will be applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

- an annual cash retainer of \$ _____ ;
- an additional annual cash retainer of \$ _____ , \$ _____ and \$ _____ for service as a member of the audit committee, compensation committee and the nominating and corporate governance committee, respectively;

- an additional annual cash retainer of \$, \$ and \$ for service as chair of the audit committee, compensation committee and the nominating and corporate governance committee, respectively;
- an initial option grant to purchase shares of our common stock on the date of each such non-employee director's appointment to our board of directors; and
- an annual option grant to purchase shares of our common stock on the date of each of our annual stockholder meetings.

Each of the option grants described above will be granted under our 2020 Plan, the terms of which are described in more detail below under the section titled "Executive Compensation—Equity Benefit Plans—2020 Equity Incentive Plan." Each such option grant will vest and become exercisable subject to the director's continuous service to us through the earlier of the first anniversary of the date of grant or the next annual stockholder meeting. The term of each option will be 10 years, subject to earlier termination as provided in the 2020 Plan.

Executive compensation

Our named executive officers for the year ended December 31, 2019 were:

- Cyrus L. Harmon, Ph.D., our Chief Technology Officer and former President and Chief Executive Officer;
- Peter J. Kushner, Ph.D., our Chief Scientific Officer; and
- David C. Myles, Ph.D., our Chief Development Officer.

Summary compensation table

The following table presents all of the compensation awarded to or earned by or paid to our named executive officers during the fiscal year ended December 31, 2019.

| Name and principal position | Fiscal year | Salary (\$) | Total (\$) |
|--|-------------|-------------|------------|
| Cyrus L. Harmon, Ph.D. <i>Chief Technology Officer and Former President and Chief Executive Officer</i> (1) | 2019 | 300,000 | 300,000 |
| Peter J. Kushner, Ph.D. <i>Chief Scientific Officer</i> | 2019 | 200,000 | 200,000 |
| David C. Myles, Ph.D. <i>Chief Development Officer</i> | 2019 | 200,000 | 200,000 |

(1) Dr. Harmon served as our Chief Executive Officer from March 2007 to September 2020, when he transitioned to the role of Chief Technology Officer. Dr. Bohen was appointed as our Chief Executive Officer in September 2020.

Narrative to the summary compensation table

Our board of directors reviews compensation annually for all employees, including our named executive officers. In making compensation determinations, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders and a long-term commitment to our company.

Our board of directors has historically determined our executive officers' compensation and has typically reviewed and discussed management's proposed compensation with our chief executive officer for all executives other than our chief executive officer. Based on those discussions and its discretion, our board of directors then approved the compensation of each executive officer. Upon the closing of this offering, the compensation committee will determine our executive officers' compensation and follow this process, but generally the compensation committee itself, rather than our board of directors, will approve the compensation of each executive officer.

Annual base salary

Base salaries for our executive officers are initially established through arm's-length negotiations at the time of the executive officer's hiring, taking into account such executive officer's qualifications, experience, the scope of his or her responsibilities and competitive market compensation paid by other companies for similar positions within the industry and geography. Base salaries are reviewed periodically, typically in connection with our annual performance review process, and adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience. In making decisions regarding salary increases, we may also draw upon the experience of members of our board of directors with executives at other companies. The 2019 base salaries for our named executive officers are reflected in the table above.

Outstanding equity awards as of December 31, 2019

There were no outstanding equity incentive plan awards held by our named executive officers as of December 31, 2019.

We may in the future, on an annual basis or otherwise, grant additional equity awards to our executive officers pursuant to our 2020 Plan, the terms of which are described below under the section titled “—Equity Benefit Plans—2020 Equity Incentive Plan.”

Emerging growth company status

We are an “emerging growth company,” as defined in the JOBS Act. As an emerging growth company we will be exempt from certain requirements related to executive compensation, including the requirements to hold a nonbinding advisory vote on executive compensation and to provide information relating to the ratio of total compensation of our chief executive officer to the median of the annual total compensation of all of our employees, each as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Pension benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during the fiscal year ended December 31, 2019.

Nonqualified deferred compensation

Our named executive officers did not participate in, or earn any benefits under, a non-qualified deferred compensation plan sponsored by us during the fiscal year ended December 31, 2019.

Employment, severance and change in control agreements

Offer letters

Below are descriptions of our offer letters with our named executive officers. For a discussion of the severance pay and other benefits to be provided in connection with a termination of employment and/or a change in control under the arrangements with our named executive officers, please see the section titled “—Potential Payments and Benefits Upon Termination or Change in Control” below.

Dr. Harmon. In June 2020, we and Dr. Harmon entered into an offer letter that governs the current terms of Dr. Harmon’s employment with us. Pursuant to the agreement, Dr. Harmon is entitled to an initial annual base salary, effective January 1, 2020, of \$450,000, is eligible to receive an annual performance bonus with a target achievement of 45% of his base salary, as determined by our board of directors, and was granted a restricted stock award of 400,000 shares of our common stock (in addition to shares of our stock that Dr. Harmon held at the time we entered into his offer letter). In September 2020, in connection with his transition to the role of Chief Technology Officer, Dr. Harmon’s annual base salary increased to \$500,000, and he was granted an option to purchase 635,272 shares of our common stock. Dr. Harmon is also entitled to certain severance benefits, the terms of which are described below under the section titled “—Potential Payments and Benefits Upon Termination or Change of Control.” Dr. Harmon’s employment is at will.

Dr. Kushner. In June 2020, we and Dr. Kushner entered into an offer letter that governs the current terms of Dr. Kushner’s employment with us. Pursuant to the agreement, Dr. Kushner is entitled to an initial annual base salary, effective January 1, 2020, of \$350,000, is eligible to receive an annual performance bonus with a target achievement of 30% of his base salary, as determined by our board of directors, and was granted a restricted stock award of 400,000 shares of our common stock (in addition to shares of our stock that Dr. Kushner held at the time we entered into his offer letter). Dr. Kushner is also entitled to certain severance benefits, the terms of which

are described below under the section titled “—Potential Payments and Benefits Upon Termination or Change of Control.” Dr. Kushner’s employment is at will.

Dr. Myles. In June 2020, we and Dr. Myles entered into an offer letter that governs the current terms of Dr. Myles’ employment with us. Pursuant to the agreement, Dr. Myles is entitled to an initial annual base salary, effective January 1, 2020, of \$340,000, is eligible to receive an annual performance bonus with a target achievement of 30% of his base salary, as determined by our board of directors, and was granted a restricted stock award of 400,000 shares of our common stock (in addition to shares of our stock that Dr. Myles held at the time we entered into his offer letter). Dr. Myles is also entitled to certain severance benefits, the terms of which are described below under the section titled “—Potential Payments and Benefits Upon Termination or Change of Control.” Dr. Myles’ employment is at will.

Potential payments and benefits upon termination or change of control

Pursuant to our named executive officers’ offer letters, if (a) the officer’s employment is terminated without cause (as defined below, and other than as a result of his death or disability or (b) the officer resigns for good reason (as defined below), then in addition to any amounts accrued and payable under the terms of our benefit plans through the date of termination, the officer will be entitled to receive severance in the form of nine months of his then base salary, such amount to be paid in equal installments over a nine-month period after the date of termination, subject to applicable taxes and withholding, as well as up to nine months of COBRA coverage. These severance benefits are conditioned upon the officer continuing to comply with his obligations under his proprietary information agreement and his delivery of a general release of claims in favor of the company that becomes effective and irrevocable within 60 days of the date of termination. Further, (a) if the officer’s employment is terminated without cause or for good reason, 50% of his then-unvested time-based equity grants shall accelerate and become fully vested as of the termination date or (b) if, within the twelve-month period that immediately follows a change of control (as defined below) or the closing of this offering, the officer’s employment is terminated without cause or for good reason, 100% of his then-unvested time-based equity grants shall accelerate and become fully vested as of the termination date.

For the purposes of our named executive officers’ severance benefits, the following definitions apply:

- “cause” means (i) the officer’s dishonest statements or acts with respect to the us or our affiliates, 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 us; (ii) the officer’s conviction of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) the officer’s repeated failure or willful or intentional failure to perform his assigned duties and responsibilities to our the reasonable satisfaction; (iv) the officer’s gross negligence, willful misconduct or insubordination, or your misfeasance or malfeasance (demonstrated by a pattern of failure to perform job duties diligently and professionally), that results in or is reasonably anticipated to result in harm to the company; or (v) the officer’s violation of any material provision of any agreement(s) between Olema and the officer, including agreements relating to non-solicitation, nondisclosure and/or assignment of inventions; provided, however, that for purposes of (i), (iii), (iv) or (v), we will provide the officer with a written notice describing the basis for the Board’s belief that he may be terminated for the occurrence of such event and an opportunity to cure such alleged deficiencies within 30 days (if such deficiency is curable).
- “change of control” means the (i) a merger, reorganization or consolidation pursuant to which the holders of our outstanding voting power immediately prior to such transaction in their capacity as such no longer own a majority of the outstanding voting power of Olema (or its successor); (ii) any sale of all or substantially all of our assets or capital stock (other than in a spin-off or similar transaction) to an unrelated person or entity; (iii) the acquisition of all or a majority of our outstanding voting stock in a single transaction or a series of related transactions by a person or entity or (iv) any other acquisition of our business, as determined by the Board in its sole discretion; provided, that, in no event shall a bona fide equity or debt financing, including a financing in which greater than 50% of our outstanding equity securities are acquired by a third-party, or

reorganization required to effect an initial public offering or solely to change our domicile or form of organization, be deemed a “change of control.”

- “good reason” means (i) a material diminution in his base salary except for across-the-board salary reductions based on our financial performance similarly affecting all or substantially all senior management employees of the company; (ii) a change in the geographic location at which the officer provides services to us of greater than twenty-five (25) miles; or (iii) a material reduction in the officer’s job duties, authorities or responsibilities. The officer’s resignation will only be for good reason if he delivers written notice of such condition(s) to us within ninety (90) days after the initial occurrence of such condition(s), the we have failed to cure such condition(s) within thirty (30) days after the delivery of such notice, and he in fact resign within 60 days after the initial notice.

Other compensation and benefits

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental and vision plans, in each case on the same basis as all of our other employees. We pay the premiums for the medical, disability, accidental death and dismemberment insurance for all of our employees, including our named executive officers. Other than a parking space for our Dr. Harmon, we generally do not provide perquisites or personal benefits to our named executive officers.

Equity benefit plans

We believe that our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of our employees, consultants and directors with the financial interests of our stockholders. In addition, we believe that our ability to grant options and other equity-based awards helps us to attract, retain and motivate employees, consultants and directors, and encourages them to devote their best efforts to our business and financial success. The principal features of our equity incentive plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which are filed as exhibits to the registration statement of which this prospectus forms a part.

2020 equity incentive plan

Prior to the closing of this offering, we expect that our board of directors will adopt, and our stockholders will approve, our 2020 Equity Incentive Plan, or 2020 Plan. We expect our 2020 Plan will become effective on the date of the underwriting agreement related to this offering. Our 2020 Plan will come into existence upon its adoption by our board of directors, but no grants will be made under our 2020 Plan prior to its effectiveness. Once our 2020 Plan becomes effective, no further grants will be made under our 2014 Stock Plan, or the 2014 Plan.

Awards. Our 2020 Plan will provide for the grant of incentive stock options, or ISOs, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, to our employees and our parent and subsidiary corporations’ employees, and for the grant of nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of awards to our employees, directors and consultants and any of our affiliates’ employees and consultants.

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2020 Plan after it becomes effective will not exceed _____ shares of our common stock, which is the sum of (i) _____ new shares, plus (ii) an additional number of shares not to exceed _____ shares, consisting of (a) shares that remain available for the issuance of awards under our 2014 Plan as of immediately prior to the time our 2020 Plan becomes effective and (b) any shares of our common stock subject to outstanding stock options or other stock awards granted under our 2014 Plan that, on or after our 2020 Plan becomes effective, terminate or expire prior to exercise or settlement; are not issued because the award is settled in cash; are forfeited because of the failure to vest; or are reacquired or withheld (or not issued) to satisfy a tax withholding obligation or the purchase or exercise price. In addition, the number of shares of our common stock reserved for issuance under our 2020 Plan will automatically increase on _____ of each year for a period of ten years, beginning on _____

, 2021 and continuing through , 2030, in an amount equal to (1) % of the total number of shares of our common stock outstanding on of the immediately preceding year, or (2) a lesser number of shares determined by our board of directors no later than of the immediately preceding year. The maximum number of shares of our common stock that may be issued on the exercise of ISOs under our 2020 Plan will be shares.

Shares subject to stock awards granted under our 2020 Plan that expire or terminate without being exercised in full or that are paid out in cash rather than in shares will not reduce the number of shares available for issuance under our 2020 Plan. Shares withheld under a stock award to satisfy the exercise, strike or purchase price of a stock award or to satisfy a tax withholding obligation will not reduce the number of shares available for issuance under our 2020 Plan. If any shares of our common stock issued pursuant to a stock award are forfeited back to or repurchased or reacquired by us (i) because of a failure to meet a contingency or condition required for the vesting of such shares; (ii) to satisfy the exercise, strike or purchase price of a stock award; or (iii) to satisfy a tax withholding obligation in connection with a stock award, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under our 2020 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2020 Plan. Our board of directors may delegate to one or more of our officers the authority to (i) designate employees (other than officers) to receive specified stock awards; and (ii) determine the number of shares subject to such stock awards. Under our 2020 Plan, our board of directors will have the authority to determine stock award recipients, the types of stock awards to be granted, grant dates, the number of shares subject to each stock award, the fair market value of our common stock, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award.

Under our 2020 Plan, our board of directors also generally will have the authority to effect, with the consent of any materially adversely affected participant, (i) the reduction of the exercise, purchase, or strike price of any outstanding option or stock appreciation right; (ii) the cancellation of any outstanding option or stock appreciation right and the grant in substitution thereof of other awards, cash, or other consideration; or (iii) any other action that is treated as a repricing under generally accepted accounting principles.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the administrator. The administrator will determine the exercise price for stock options, within the terms and conditions of our 2020 Plan, except the exercise price of a stock option generally will not be less than 100% of the fair market value of our common stock on the date of grant. Options granted under our 2020 Plan will vest at the rate specified in the stock option agreement as will be determined by the administrator.

The administrator will determine the term of stock options granted under our 2020 Plan, up to a maximum of 10 years. Unless the terms of an optionholder's stock option agreement, or other written agreement between us and the recipient, provide otherwise, if an optionholder's service relationship with us or any of our affiliates ceases for any reason other than disability, death, or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws. If an optionholder's service relationship with us or any of our affiliates ceases due to death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 18 months following the date of death. If an optionholder's service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the administrator and may include (i) cash, check, bank draft or money order; (ii) a broker-assisted cashless exercise; (iii) the tender of shares of our common stock previously owned by the optionholder; (iv) a net exercise of the option if it is an NSO; or (v) other legal consideration approved by the administrator.

Unless the administrator provides otherwise, options or stock appreciation rights generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the administrator or a duly authorized officer, an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an award holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations unless (i) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant; and (ii) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, or other written agreement between us and the recipient, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, past or future services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The administrator will determine the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Stock Appreciation Rights. Stock appreciation rights are granted under stock appreciation right agreements adopted by the administrator. The administrator will determine the purchase price or strike price for a stock appreciation right, which generally will not be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under our 2020 Plan will vest at the rate specified in the stock appreciation right agreement as will be determined by the administrator. Stock appreciation rights may be settled in cash or shares of our common stock or in any other form of payment as determined by our board of directors and specified in the stock appreciation right agreement.

The administrator will determine the term of stock appreciation rights granted under our 2020 Plan, up to a maximum of 10 years. If a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability, or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. This period may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate upon the termination date. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. Our 2020 Plan will permit the grant of performance awards that may be settled in stock, cash or other property. Performance awards may be structured so that the stock or cash will be issued or paid only

following the achievement of certain pre-established performance goals during a designated performance period. Performance awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, our common stock.

The performance goals may be based on any measure of performance selected by our board of directors. The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by our board of directors at the time the performance award is granted, our board will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (i) to exclude restructuring or other nonrecurring charges; (ii) to exclude exchange rate effects; (iii) to exclude the effects of changes to generally accepted accounting principles; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (vi) to exclude the dilutive effects of acquisitions or joint ventures; (vii) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (viii) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (ix) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (xi) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other Stock Awards. The administrator will be permitted to grant other awards based in whole or in part by reference to our common stock. The administrator will set the number of shares under the stock award (or cash equivalent) and all other terms and conditions of such awards.

Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid to any non-employee director with respect to any calendar year, including awards granted and cash fees paid by us to such non-employee director, will not exceed \$ _____ in total value, except such amount will increase to \$ _____ for the first year for newly appointed or elected non-employee directors.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split, or recapitalization, appropriate adjustments will be made to (i) the class and maximum number of shares reserved for issuance under our 2020 Plan, (ii) the class and maximum number of shares by which the share reserve may increase automatically each year, (iii) the class and maximum number of shares that may be issued on the exercise of ISOs, and (iv) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of a corporate transaction (as defined below), unless otherwise provided in a participant's stock award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the administrator at the time of grant, any stock awards outstanding under our 2020 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the stock award may be assigned to the successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then (i) with respect to any such stock awards that are held by participants whose continuous service has not terminated prior to the effective time of the corporate transaction, or current participants, the vesting (and exercisability, if applicable) of such stock awards will be accelerated in full (or, in the case of performance awards with multiple vesting levels depending on the level of performance, vesting will accelerate at 100% of the target level) to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the

effectiveness of the corporate transaction); and (ii) any such stock awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the corporate transaction.

In the event a stock award will terminate if not exercised prior to the effective time of a corporate transaction, the administrator may provide, in its sole discretion, that the holder of such stock award may not exercise such stock award but instead will receive a payment equal in value to the excess (if any) of (i) the value of the property the participant would have received upon the exercise of the stock award, over (ii) any per share exercise price payable by such holder, if applicable. In addition, any escrow, holdback, earn out or similar provisions in the definitive agreement for the corporate transaction may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of our common stock.

Under our 2020 Plan, a "corporate transaction" is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets; (ii) a sale or other disposition of at least 50% of our outstanding securities; (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation; or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. Stock awards granted under our 2020 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control (as defined below) as may be provided in the applicable stock award agreement or in any other written agreement between us or any affiliate and the participant, but in the absence of such provision, no such acceleration will automatically occur.

Under our 2020 Plan, a "change in control" is generally (i) the acquisition by any person or company of more than 50% of the combined voting power of our then outstanding stock; (ii) a merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately prior to such transaction; (iii) stockholder approval of a complete dissolution or liquidation; (iv) a sale, lease, exclusive license or other disposition of all or substantially all of our assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction; or (v) when a majority of our board of directors becomes comprised of individuals who were not serving on our board of directors on the date of the underwriting agreement related to this offering, or the incumbent board, or whose nomination, appointment, or election was not approved by a majority of the incumbent board still in office.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2020 Plan at any time, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2020 Plan. No stock awards may be granted under our 2020 Plan while it is suspended or after it is terminated.

2014 stock plan

Our board of directors adopted the 2014 Plan in December 2014, and our stockholders adopted the 2014 Plan in the same month. The 2014 Plan provides for the grant of ISOs, NSOs, restricted stock purchase rights and restricted stock bonuses, to our employees, directors and consultants. ISOs may be granted only to our employees or employees of our affiliates.

The 2014 Plan will be terminated on the date the 2020 Plan becomes effective. However, any outstanding awards granted under the 2014 Plan will remain outstanding, subject to the terms of our 2014 Plan and award agreements, until such outstanding options are exercised or until any awards terminate or expire by their terms.

Authorized Shares. Upon the effective date of the 2020 Plan, we will no longer grant awards under our 2014 Plan. As of September 30, 2020, options to purchase 6,986,227 shares of our common stock were outstanding, and 3,275,926 shares of our common stock remained available for future issuance under our 2014 Plan. The options outstanding as of September 30, 2020 had a weighted-average exercise price of \$1.49 per share. Subject to capitalization adjustment, the maximum aggregate number of shares of common stock that may be issued under the 2014 Plan is 13,500,000 shares, and the maximum number of shares issuable pursuant to ISOs is 34,500,000 shares.

Plan Administration. Our board or a duly authorized committee of our board administers our 2014 Plan and the awards granted under it. The administrator has the power to modify outstanding awards under our 2014 Plan. In addition to other powers set forth in the 2014 Plan, our board has the full and final power and authority, in its discretion to: (1) determine the persons to whom awards shall be granted; (2) the type of award granted; (3) the fair market value of shares; (4) the terms, conditions and restrictions applicable to each award and any shares acquired pursuant thereto; (5) approve one or more form of award agreement; (6) amend, modify, extend, cancel or renew any award to waive any restrictions or conditions applicable to any award or shares; (7) accelerate, continue, extend or defer the exercisability or vesting of any award or shares acquired pursuant thereto; (8) prescribe, amend or rescind rules, guidelines and policies relating to the plan and to adopt sub-plans or supplements to or alternative versions of the plan; and (9) to correct any defect, supply any omission or reconcile any inconsistency in the plan of any award agreement and to make all other determinations and take such other actions with respect to the plan or any award agreement and make all determinations and take other actions with respect to the plan or any award agreement.

Corporate Transactions. Our 2014 Plan provides that in the event of certain specified significant corporate transactions, as defined under our 2014 Plan, our board may (1) accelerate vesting of outstanding awards (2) arrange for the assumption, continuation or substitution of an award by an acquirer; (3) cancel and exchange awards for a payment in cash, stock, or other property equal to the fair market value of the shares being canceled minus any exercise or purchase price.

Transferability. The 2014 Plan imposes limitations on the transferability of ISOs and NSOs. During a participant's lifetime an option may only be exercised by a participant. The Board may permit the transfer of options as set forth in an award agreement as permitted by Rule 701 of the Securities Act of 1933, as amended, or the Securities Act, the General Instructions to the Form S-8 Registration Statement or for ISOs only, Section 421 of the Code.

Plan Amendment or Termination. Our board has the authority to amend, suspend or terminate our 2014 Plan at any time, subject to stockholder approval if required by law or stock exchange rules. Additionally, no amendment, suspension or termination may have any materially adverse effect on any then outstanding award without the consent of the participant. As described above, our 2014 Plan will be terminated upon the effective date of the 2020 Plan and no future awards will be granted under the 2014 Plan following such termination.

2020 employee stock purchase plan

Prior to the closing of this offering, our board of directors intends to adopt, and we expect our stockholders will approve, our 2020 Employee Stock Purchase Plan, or ESPP. Our ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of our ESPP will be to secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. Our ESPP will include two components. One component will be designed to allow eligible U.S. employees to purchase our common stock in a manner that may qualify for favorable tax treatment under Section 423 of the Code. The other component will permit the grant of purchase rights that do not qualify for such favorable tax treatment in order to allow deviations necessary to permit participation by eligible employees who are foreign nationals or employed outside of the U.S. while complying with applicable foreign laws.

Share Reserve. Following this offering, our ESPP will authorize the issuance of _____ shares of our common stock under purchase rights granted to our employees or to employees of any of our designated affiliates. The

number of shares of our common stock reserved for issuance will automatically increase on _____ of each year for a period of ten years, beginning on _____, 2021 and continuing through _____, 2030, by the lesser of (i) _____ % of the total number of shares of our common stock outstanding on _____ of the immediately preceding year; and (ii) _____ shares, except before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (i) and (ii).

Administration. Our board of directors will administer our ESPP and may delegate its authority to administer our ESPP to our compensation committee. Our ESPP will be implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under our ESPP, our board of directors will be permitted to specify offerings with durations of not more than 27 months and to specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. Our ESPP will provide that an offering may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, will be eligible to participate in our ESPP and to contribute, normally through payroll deductions, up to _____ % of their earnings (as defined in our ESPP) for the purchase of our common stock under our ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in our ESPP at a price per share equal to the lesser of (i) 85% of the fair market value of a share of our common stock on the first day of an offering; or (ii) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in our ESPP, as determined by our board of directors: (i) being customarily employed for more than 20 hours per week; (ii) being customarily employed for more than five months per calendar year; or (iii) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee will be permitted to purchase shares under our ESPP at a rate in excess of \$25,000 worth of our common stock (based on the fair market value per share of our common stock at the beginning of an offering) for each calendar year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under our ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value under Section 424(d) of the Code.

Changes to Capital Structure. Our ESPP will provide that in the event there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or similar transaction, our board of directors will make appropriate adjustments to: (i) the class(es) and maximum number of shares reserved under our ESPP; (ii) the class(es) and maximum number of shares by which the share reserve may increase automatically each year; (iii) the class(es) and number of shares subject to, and purchase price applicable to, outstanding offerings and purchase rights; and (iv) the class(es) and number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. Our ESPP will provide that in the event of a corporate transaction (as defined below), any then-outstanding rights to purchase our stock under our ESPP may be assumed, continued, or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue, or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days before such corporate transaction, and such purchase rights will terminate immediately after such purchase.

Under our ESPP, a "corporate transaction" is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets; (ii) a sale or other disposition of at least 50% of our outstanding securities; (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation; or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation

but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Amendment or Termination. Our board of directors will have the authority to amend or terminate our ESPP, except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

Limitations on liability and indemnification

Our amended and restated certificate of incorporation, which will become effective immediately after the closing of this offering, will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation will authorize us to indemnify our directors, officers, employees and other agents to the fullest extent permitted by Delaware law. Our amended and restated bylaws will provide that we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our amended and restated bylaws will also provide that, on satisfaction of certain conditions, we will advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and 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 that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding.

We believe that these amended and restated certificate of incorporation and amended and restated bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 plans

Our directors, officers and key consultant may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades under parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they do not possess of material nonpublic information, subject to compliance with the terms of our insider trading policy. During the first 180 days from this offering, the sale of any shares under such plan would be subject to the lock-up agreement that the director or officer has entered into with the underwriters.

Certain relationships and related person transactions

The following includes a summary of transactions since January 1, 2017 and any currently proposed transactions to which we have been or are to be a party in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under the section titled "Executive Compensation." We also describe below certain other transactions with our directors, executive officers and stockholders.

Series C convertible preferred stock financing

In September 2020, we completed the closing of an aggregate of 22,036,764 shares of our Series C convertible preferred stock at a purchase price of \$3.96782 per share.

The following table summarizes purchases of shares of our Series C convertible preferred stock by holders of more than 5% of our capital stock and entities affiliated with our executive officers and members of our board of directors.

| Participants ⁽¹⁾ | Shares of Series C convertible preferred stock purchased for cash (#) | Aggregate purchase price |
|--|---|--------------------------|
| Entities affiliated with Biotechnology Value Fund L.P. ⁽²⁾ | 3,780,413 | \$ 14,999,998 |
| Entities affiliated with Cormorant Private Healthcare Fund II, LP ⁽³⁾ | 2,016,220 | \$ 7,999,998 |
| Entities managed by Janus Capital Management, LLC ⁽⁴⁾ | 2,066,626 | \$ 8,200,000 |
| Entities affiliated with RA Capital Healthcare Fund L.P. ⁽⁵⁾ | 1,260,137 | \$ 4,999,997 |
| Logos Opportunities Fund II, L.P. | 3,298,523 | \$ 13,087,946 |
| Wellington Biomedical Innovation Master Investors (Cayman) I L.P. | 1,260,137 | \$ 4,999,997 |

(1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the section titled "Principal Stockholders."

(2) Consists of (i) 2,119,314 shares of Series C convertible preferred stock purchased by Biotechnology Value Fund L.P., or BVF, (ii) 1,456,461 shares of Series C convertible preferred stock purchased by Biotechnology Value Fund II, L.P., or BVF II, and (iii) 204,638 shares of Series C convertible preferred stock purchased by Biotechnology Value Trading Fund OS L.P., or BVF OS. Dr. Hrustanovic, a member of our board of directors, is a Principal of BVF.

(3) Consists of (i) 1,638,985 shares of Series C convertible preferred stock purchased by Cormorant Private Healthcare Fund III, LP, (ii) 351,629 shares of Series C convertible preferred stock purchased by Cormorant Global Healthcare Master Fund, LP, or Cormorant Master Fund, and (iii) 25,606 shares of Series C convertible preferred stock purchased by CRMA SPV, L.P, or CRMA.

(4) Janus Capital Management LLC, or Janus Capital, is an independent investment advisor registered under the Investment Advisers Act of 1940. Shares held by entities for whom Janus Capital is the investment advisor and who are holding our securities are aggregated for purposes of reporting share ownership information, including (i) 1,057,577 shares of Series C convertible preferred stock purchased by Janus Henderson Global Life Sciences Fund, or Janus Global Fund, (ii) 989,348 shares of Series C convertible preferred stock purchased by Janus Henderson Capital Funds PLC on behalf of its series Janus Henderson Global Life Sciences Fund, or Janus Capital Funds, and (iii) 19,701 shares of Series C convertible preferred stock purchased by Janus Henderson Horizon Fund—Biotechnology Fund.

(5) Consists of (i) 857,978 shares of Series C convertible preferred stock purchased by RA Capital Healthcare Fund L.P., (ii) 315,034 shares of Series C convertible preferred stock purchased by RA Capital Nexus Fund L.P., and (iii) 87,125 shares of Series C convertible preferred stock purchased by Blackwell Partners LLC—Series A.

2020 convertible notes and Series B convertible preferred stock financing

In January 2020, we issued convertible promissory notes in the aggregate principal amount of \$3.0 million to entities affiliated with Biotechnology Value Fund, L.P., a holder of more than 5% of our capital stock, which we refer to as the BVF Notes. The BVF Notes accrued interest at the rate of 1.21% per annum and had a maturity date of May 2, 2020.

In March and June 2020, we completed three closings of an aggregate of 31,893,492 shares of our Series B convertible preferred stock at a purchase price of \$1.69 per share.

The following table summarizes purchases of shares of our Series B convertible preferred stock by holders of more than 5% of our capital stock and entities affiliated with our executive officers and members of our board of directors.

| Participants ⁽¹⁾ | Shares of Series B convertible preferred stock purchased for cash (#) | Shares of Series B convertible preferred stock issued upon conversion of BVF Notes (#) | Aggregate purchase price |
|--|---|--|--------------------------|
| Entities affiliated with Biotechnology Value Fund L.P. | 2,954,226 ⁽²⁾ | 1,779,502 ⁽³⁾ | \$ 8,000,000 |
| Entities affiliated with Cormorant Private Healthcare Fund II, LP ⁽⁴⁾ | 5,917,160 | — | \$ 10,000,000 |
| Entities managed by Janus Capital Management, LLC ⁽⁵⁾ | 6,065,089 | — | \$ 10,250,000 |
| Entities affiliated with RA Capital Healthcare Fund L.P. ⁽⁶⁾ | 3,550,296 | — | \$ 6,000,000 |
| Logos Opportunities Fund I L.P. | 3,905,326 | — | \$ 6,600,001 |
| Wellington Biomedical Innovation Master Investors (Cayman) I L.P. | 3,550,296 | — | \$ 6,000,000 |

- (1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the section titled "Principal Stockholders."
- (2) Consists of (i) 1,521,352 shares of Series B convertible preferred stock purchased by BVF, (ii) 1,134,046 shares of Series B convertible preferred stock purchased by BVF II, (iii) 205,043 shares of Series B convertible preferred stock purchased by BVF OS, and (iv) 93,785 shares of Series B convertible preferred stock purchased by MSI BVF SPV LLC, or MSI BVF. Dr. Hrustanovic, a member of our board of directors, is a Principal of BVF.
- (3) Consists of (i) 957,703 shares of Series B convertible preferred stock issued to BVF, (ii) 743,064 shares of Series B convertible preferred stock issued to BVF II, and (iii) 78,735 shares of series B convertible preferred stock issued to BVF OS.
- (4) Consists of (i) 4,697,557 shares of Series B convertible preferred stock purchased by Cormorant Private Healthcare Fund II LP, (ii) 1,149,610 shares of Series B convertible preferred stock purchased by Cormorant Master Fund, and (iii) 69,993 shares of Series B convertible preferred stock purchased by CRMA.
- (5) Janus Capital is an independent investment advisor registered under the Investment Advisers Act of 1940. Shares held by entities for whom Janus Capital is the investment advisor and who are holding our securities are aggregated for purposes of reporting share ownership information, including (i) 3,056,701 shares of Series B convertible preferred stock purchased by Janus Global Fund, (ii) 1,974,986 shares of Series B convertible preferred stock purchased by Janus Capital Funds, and (iii) 1,033,402 shares of Series B convertible preferred stock purchased by Janus Henderson Biotech Innovation Master Fund Limited.
- (6) Consists of (i) 2,374,213 shares of Series B convertible preferred stock purchased by RA Capital Healthcare Fund L.P., (ii) 887,574 shares of Series B convertible preferred stock purchased by RA Capital Nexus Fund L.P., and (iii) 288,509 shares of Series B convertible preferred stock purchased by Blackwell Partners LLC—Series A

2017 and 2018 convertible notes

From April 2017 through April 2018, we issued convertible promissory notes in the aggregate principal amount of \$1.0 million, which we refer to as the A-1 Notes. The A-1 Notes accrued interest at the rate of 6% per annum and provided that in the event of a qualified equity financing in an amount not less than \$3 million, the A-1 Notes would automatically convert into shares of our convertible preferred stock and common stock. The A-1 Notes converted into 1,439,313 shares of Series A-1 convertible preferred stock and 359,937 shares of common stock in July 2018.

The following table summarizes aggregate principal amount of A-1 Notes issued to holders of more than 5% of our capital stock, our directors and executive officers and entities affiliated with our executive officers and members of our board of directors.

| Noteholder ⁽¹⁾ | Aggregate principal amount |
|---|----------------------------|
| Peter J. Kushner, Ph.D. | \$ 254,056 |
| Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) | \$ 300,000 |
| SPW Investments LLC ⁽²⁾ | \$ 252,625 |

- (1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the section titled "Principal Stockholders."
- (2) Mr. Rappaport, one of our directors, is a managing member of Skyline Public Works, LLC, which is the general partner of SPW Investments LLC.

Series A-1 convertible preferred stock financing

In July 2018, we completed the closing of an aggregate of 8,263,388 shares of our Series A-1 convertible preferred stock, which includes the shares issued upon conversion of the A-1 Notes, at a purchase price of \$0.7327 per share.

The following table summarizes purchases of shares of our Series A-1 convertible preferred stock by holders of more than 5% of our capital stock, our directors and executive officers and entities affiliated with our executive officers and members of our board of directors.

| Participants ⁽¹⁾ | Shares of Series A-1 convertible preferred stock purchased for cash (#) | Shares of Series A-1 convertible preferred stock issued upon conversion of A-1 Notes (#) | Shares of common stock issued upon conversion of A-1 Notes (#) | Aggregate purchase price |
|---|---|--|--|--------------------------|
| Entities affiliated with Biotechnology Value Fund L.P. ⁽²⁾ | 6,824,075 | — | — | \$ 5,000,000 |
| Peter J. Kushner, Ph.D. | — | 362,886 | 90,835 | \$ 266,226 |
| Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) | — | 426,261 | 106,564 | \$ 312,322 |
| SPW Investments LLC ⁽³⁾ | — | 361,976 | 90,493 | \$ 265,221 |

(1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the caption "Principal Stockholders."

(2) Consists of (i) 3,148,781 shares of Series A-1 convertible preferred stock purchased by BVF, (ii) 2,456,665 shares of Series A-1 convertible preferred stock purchased by BVF II, (iii) 518,312 shares of Series A-1 convertible preferred stock purchased by BVF OS, (iv) 277,564 shares of Series A-1 convertible preferred stock purchased by Investment 10 LLC, and (v) 422,753 shares of Series A-1 convertible preferred stock purchased by MSI BVF. Dr. Hrustanovic, a member of our board of directors, is a Principal of BVF.

(3) Mr. Rappaport, one of our directors, is a managing member of Skyline Public Works, LLC, which is the general partner of SPW Investments LLC.

Employment agreements and stock option grants to directors and executive officers

We have entered into employment agreements with certain of our named executive officers, and granted stock options to our named executive officers and certain of our directors, as more fully described in the sections titled "Executive Compensation" and "Management—Non-Employee Director Compensation."

Investors' rights agreement

In September 2020, we entered into an Amended and Restated Investors' Rights Agreement, or the Rights Agreement, with certain holders of more than 5% of our outstanding capital stock, including entities affiliated with Biotechnology Value Fund, L.P., entities affiliated with Cormorant Private Healthcare Fund II, LP, entities affiliated with Janus Henderson Global Life Sciences Fund, entities affiliated with Logos Opportunities Fund I L.P., entities affiliated with RA Capital Healthcare Fund L.P. and Wellington Biomedical Innovation Master Investors (Cayman) I L.P., and including certain affiliates of our directors.

The Rights Agreement grants to the holders of our outstanding convertible preferred stock certain rights, including certain registration rights with respect to the registrable securities held by them. See the section titled "Description of Capital Stock—Registration Rights" for additional information. In addition, the Rights Agreement imposes certain affirmative obligations on us, including our obligation to, among other things, (i) grant each holder who holds at least 500,000 shares of our convertible preferred stock, or the Major Investors, a right of first offer with respect to future sales of our equity, excluding the shares to be offered and sold in this offering. The Rights Agreement also grants certain information and inspection rights to such Major Investors and certain holders of our outstanding convertible preferred stock upon request. Each of these obligations will terminate in connection with the closing of this offering.

Voting agreement

In September 2020, we entered into an Amended and Restated Voting Agreement, or the Voting Agreement, with certain holders of more than 5% of our outstanding capital stock, including entities affiliated with Biotechnology Value Fund, L.P., entities affiliated with Cormorant Private Healthcare Fund II, LP, entities affiliated with Janus Henderson Global Life Sciences Fund, entities affiliated with Logos Opportunities Fund I L.P., entities affiliated with RA Capital Healthcare Fund L.P. and Wellington Biomedical Innovation Master Investors (Cayman) I L.P., and including certain affiliates of our directors.

Pursuant to the Voting Agreement, each of Biotechnology Value Fund, LP and Logos Global Management LP have the right to designate one member to be elected to our board of directors, and Biotechnology Value Fund, LP, Logos Global Management LP and Janus Capital Management LLC, collectively, have the right to designate one director. See the section titled “Management—Composition of Our Board of Directors.” The Voting Agreement will terminate by its terms in connection with the closing of this offering and none of our stockholders will have any continuing rights regarding the election or designation of members of our board of directors following this offering.

Right of first refusal and co-sale agreement

In September 2020, we entered into an Amended and Restated Right of First Refusal and Co-Sale Agreement, or the Co-Sale Agreement, with certain holders of more than 5% of our outstanding capital stock, including entities affiliated with Biotechnology Value Fund, L.P., entities affiliated with Cormorant Private Healthcare Fund II, LP, entities affiliated with Janus Henderson Global Life Sciences Fund, entities affiliated with Logos Opportunities Fund I L.P., entities affiliated with RA Capital Healthcare Fund L.P. and Wellington Biomedical Innovation Master Investors (Cayman) I L.P., and including certain affiliates of our directors.

Pursuant to the Co-Sale Agreement, we have a right of first refusal in respect of certain sales of securities by certain holders of our common stock and convertible preferred stock. To the extent we do not exercise such right in full, the Major Investors are granted certain rights of first refusal and co-sale in respect of such sale. The Co-Sale Agreement will terminate in connection with the closing of this offering.

Indemnification agreements

Our amended and restated certificate of incorporation will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our employees and other agents when determined appropriate by the board. In addition, we have entered into or intend to enter into an indemnification agreement with each of our directors and executive officers, which will require us to indemnify them. For more information regarding these agreements, see the section titled “Executive Compensation—Limitations on Liability and Indemnification.”

Policies and procedures for transactions with related persons

Prior to closing of this offering, we intend to adopt a written policy that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock and any members of the immediate family of any of the foregoing persons are not permitted to enter into a related person transaction with us without the approval or ratification of our board of directors or our audit committee. Any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of any class of our common stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeds \$120,000 and such person would have a direct or indirect interest, must be presented to our board of directors or our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our board of directors or our audit committee is to consider the material facts of the transaction, including whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction.

Principal stockholders

The following table sets forth information regarding beneficial ownership of our capital stock as of September 30, 2020 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 our of named executive officers; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules and regulations of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership before the offering is based on 76,725,191 shares of our common stock outstanding as of September 30, 2020, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 66,257,144 shares of our common stock in connection with the closing of this offering and including 2,496,352 shares of our unvested restricted common stock subject to repurchase as of such date.

Applicable percentage ownership after the offering is based on _____ shares of common stock outstanding immediately after the closing of this offering, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our common stock in connection with the closing of this offering and including _____ shares of our unvested restricted common stock subject to repurchase as of _____. In computing the number of shares beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares subject to options held by the person that are currently exercisable, or exercisable within 60 days of September 30, 2020. However, except as described above, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address for each beneficial owner listed in the table below is c/o Olema Pharmaceuticals, Inc., 512 2nd Street, 4th Floor, San Francisco, CA 94107.

| Name of beneficial owner | Number of shares beneficially owned (#) | Percentage of shares beneficially owned | |
|---|---|---|--------------------|
| | | Before offering (%) | After offering (%) |
| Greater than 5% Holders: | | | |
| Entities affiliated with Biotechnology Value Fund L.P. ⁽¹⁾ | 15,338,216 | 20.0 | |
| Entities affiliated with Cormorant Private Healthcare Fund II, LP ⁽²⁾ | 7,933,380 | 10.3 | |
| Entities affiliated with Janus Henderson Global Life Sciences Fund ⁽³⁾ | 8,131,715 | 10.6 | |
| Entities affiliated with Logos Opportunities Fund I L.P. ⁽⁴⁾ | 7,203,849 | 9.4 | |
| Entities affiliated with RA Capital Healthcare Fund L.P. ⁽⁵⁾ | 4,810,433 | 6.3 | |
| Wellington Biomedical Innovation Master Investors (Cayman) I L.P. ⁽⁶⁾ | 4,810,433 | 6.3 | |
| Directors and Named Executive Officers: | | | |
| Cyrus L. Harmon, Ph.D. ⁽⁷⁾ | 3,465,677 | 4.5 | |
| Peter J. Kushner, Ph.D. ⁽⁸⁾ | 3,991,509 | 5.2 | |
| David C. Myles, Ph.D. ⁽⁹⁾ | 2,117,485 | 2.8 | |
| Andrew Rappaport ⁽¹⁰⁾ | 1,599,888 | 2.1 | |
| Cynthia Butitta ⁽¹¹⁾ | 233,847 | * | |
| Ian Clark ⁽¹²⁾ | 584,618 | * | |
| Gorjan Hrustanovic, Ph.D. | — | * | |
| Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) ⁽¹³⁾ | 976,561 | 1.3 | |
| Graham Walmsley, M.D., Ph.D. ⁽¹⁴⁾ | 7,203,849 | 9.4 | |
| All directors and executive officers as a group (13 persons) ⁽¹⁵⁾ | 24,815,350 | 30.5 | |

* Represents beneficial ownership of less than 1%.

- (1) Consists of (i) 3,148,781 shares of common stock issuable upon conversion of the Series A-1 convertible preferred stock held by Biotechnology Value Fund L.P., or BVF, (ii) 2,479,055 shares of common stock issuable upon conversion of the Series B convertible preferred stock held by BVF, (iii) 2,119,314 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by BVF, (iv) 2,456,665 shares of common stock issuable upon conversion of the Series A-1 convertible preferred stock held by Biotechnology Value Fund II, L.P., or BVF II, (v) 1,877,110 shares of common stock issuable upon conversion of the Series B convertible preferred stock held by BVF II, (vi) 1,456,461 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by BVF II, (vii) 518,312 shares of common stock issuable upon conversion of the Series A-1 convertible preferred stock held by Biotechnology Value Trading Fund OS L.P., or BVF OS, (viii) 283,778 shares of common stock issuable upon conversion of the Series B convertible preferred stock held by BVF OS, (ix) 204,638 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by BVF OS, (x) 277,564 shares of common stock issuable upon conversion of the Series A-1 convertible preferred stock held by Investment 10 LLC, or Investment 10, (xi) 422,753 shares of common stock issuable upon conversion of the Series A-1 convertible preferred stock held by MSI BVF SPV LLC, or MSI BVF, and (xii) 93,785 shares of common stock issuable upon conversion of the Series B convertible preferred stock held by MSI BVF, BVF I GP LLC, or BVF I GP, as the general partner of BVF, may be deemed to beneficially own the shares beneficially owned by BVF, BVF II GP LLC, or BVF II GP, as the general partner of BVF II, may be deemed to beneficially own the shares beneficially owned by BVF II, BVF Partners OS Ltd., or Partners OS, as the general partner of BVF OS, may be deemed to beneficially own the shares beneficially owned by BVF OS, BVF Partners L.P., or BVF Partners, as the sole member of Partners OS, and attorney-in-fact to each of Investment 10 and MSI BVF, may be deemed to beneficially own the shares beneficially owned by Partners OS, Investment 10 and MSI BVF, BVF Inc., as the general partner of BVF Partners, may be deemed to beneficially own the shares beneficially owned by BVF Partners. Mark Lampert, as a director and officer of BVF Inc., and as a director and officer of each of BVF I GP and BVF II GP, may be deemed to beneficially own the shares that are beneficially owned by BVF Inc., BVF I GP and BVF II GP. The address of each of BVF and BVF II is 44 Montgomery St. 40th floor, San Francisco, California 94104. The address of BVF OS is PO Box 309 Ugland House, Grand Cayman, KY-1 1104, Cayman Islands. The address of Investment 10 is 900 N. Michigan Avenue, Suite 1100, Chicago, Illinois 60611. The address of MSI BVF is 200 Park Avenue, 56th Floor, New York, New York 10166.
- (2) Consists of (i) 1,149,610 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Cormorant Global Healthcare Master Fund, LP, or Cormorant Master Fund, (ii) 351,629 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Cormorant Master Fund, (iii) 4,697,557 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Cormorant Private Healthcare Fund II LP, or Cormorant Fund II, (iv) 1,638,985 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Cormorant Private Healthcare Fund III, LP, or Cormorant Fund III, (v) 69,993 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by CRMA, SPV L.P., or CRMA, and (vi) 25,606 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by CRMA. Cormorant Global Healthcare GP, LLC, or Global GP, is the general partner of Cormorant Master Fund, and Cormorant Private Healthcare II GP, LLC, or Private GP, is the general partner of

- Cormorant Fund II and Cormorant Fund III. Bihua Chen serves as the managing member of both Global GP and Private GP, and as the general partner of Cormorant Asset Management, LP, or Cormorant LP. Cormorant LP serves as the investment manager to Cormorant Fund II, Cormorant Fund III, Cormorant Master Fund and CRMA. Ms. Chen has sole voting and investment control over the shares held by the Cormorant Master Fund, Cormorant Fund II and CRMA. The address for each of the entities is 200 Clarendon Street, 52nd Floor, Boston Massachusetts 02116.
- (3) Consists of (i) 1,033,402 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Janus Henderson Biotech Innovation Master Fund Limited, or Janus Biotech, (ii) 1,974,986 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Janus Henderson Capital Funds PLC on behalf of its series Janus Henderson Global Life Sciences Fund, or Janus Capital Funds, (iii) 989,348 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Janus Capital Funds, (iv) 3,056,701 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Janus Henderson Global Life Sciences Fund, or Janus Global Fund, (v) 1,057,577 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Janus Global Fund, and (vi) 19,701 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Janus Henderson Horizon Fund - Biotechnology Fund, or Janus Horizon. Janus Capital Management LLC, or Janus Capital, is the investment adviser to Janus Biotech, Janus Capital Funds and Janus Global Fund. The portfolio manager for each of Janus Global Fund, Janus Capital Funds and Janus Horizon is Andrew Acker, and the portfolio managers for Janus Biotech are Andrew Acker and Dan Lyons. Janus Capital, Andrew Acker and Dan Lyons may be deemed to have voting and dispositive power over the shares held by Janus Biotech. The address of the principal business office of each of the foregoing entities is c/o Janus Capital Management LLC, 151 Detroit Street, Denver, Colorado 80206.
- (4) Consists of (i) 3,905,326 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Logos Opportunities Fund I L.P., or Logos Fund I, and (ii) 3,298,523 shares of common stock issuable upon the conversion of Series C convertible preferred stock held by Logos Opportunities Fund II, L.P., or Logos Fund II. Logos Opportunities GP, LLC, or Logos GP, is the general partner of Logos Fund I and Logos Fund II. Dr. Arsani William and Dr. Graham Walmsley are the managing members of Logos GP and share voting and dispositive power with respect to the shares held of record by Logos Fund I and Logos Fund II. The address for these entities is c/o Logos Global Management, LP, 1 Letterman Drive, Building D, Suite D3-700, San Francisco, California 94129.
- (5) Consists of (i) 2,374,213 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by RA Capital Healthcare Fund L.P., or RA Healthcare, (ii) 857,978 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by RA Healthcare, (iii) 887,574 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by RA Capital Nexus Fund L.P., or RA Nexus, (iv) 315,034 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by RA Nexus, (v) 288,509 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Blackwell Partners LLC— Series A, or Blackwell and (vi) 87,125 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Blackwell. RA Capital Management, L.P., or RA Management, is the investment manager for RA Healthcare, RA Nexus and Blackwell. The general partner of RA Management is RA Capital Management GP, LLC, or RA GP, of which Peter Kolchinsky and Rajeev Shah are managing members. RA Management, RA GP, Peter Kolchinsky and Rajeev Shah may be deemed to have voting and investment power over the shares held of record by RA Healthcare, RA Nexus and Blackwell. The address of the entities listed above is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.
- (6) Consists of (i) 3,550,296 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by Wellington Biomedical Innovation Master Investors (Cayman) I L.P., or Wellington Biomedical and (ii) 1,260,137 shares of common stock issuable upon conversion of the Series C convertible preferred stock held by Wellington Biomedical. Wellington Management Company LLP, a registered investment advisor under the Investment Advisers Act of 1940, as amended, is the investment advisor to Wellington Biomedical, and Wellington Alternative Investments LLC is its general partner. Wellington Management Investment, Inc. is the managing member of Wellington Alternative Investments LLC. Wellington Management Company LLP is an indirect subsidiary of Wellington Management Group LLP. Wellington Management Group LLP and Wellington Management Company LLP may be deemed beneficial owners with shared voting and investment power over the shares held by Wellington Biomedical. The address for Wellington Biomedical and the Wellington entities is 280 Congress Street, Boston, Massachusetts 02210.
- (7) Consists of (i) 2,900,000 shares of common stock held directly by Dr. Harmon, (ii) 198,992 shares of common stock issuable upon the conversion of Series A convertible preferred stock held directly by Dr. Harmon, (iii) 340,216 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by Harmon Family Investors LLC, over which Dr. Harmon holds voting and investment power as manager, and (iv) 26,469 shares of common stock issuable upon exercise of stock options held by Dr. Harmon that are exercisable within 60 days of September 30, 2020.
- (8) Consists of (i) 2,990,835 shares of common stock, (ii) 637,788 shares of common stock issuable upon the conversion of Series A convertible preferred stock, and (iii) 362,886 shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock.
- (9) Consists of (i) 1,650,000 shares of common stock held directly by Dr. Myles, (ii) 35,773 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by The Myles Family Revocable Inter Vivos Trust, over which Dr. Myles holds voting and investment power as trustee, and (iii) 431,712 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by Myles Properties Inc., over which Dr. Myles holds voting and investment power as President.
- (10) Consists of (i) 90,493 shares of common stock held by SPW Investments LLC, or SPWI, (ii) 888,601 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by SPWI, (iii) 361,976 shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock held by SPWI, and (iv) 258,818 shares of common stock issuable upon exercise of stock options held by Mr. Rappaport that are exercisable within 60 days of September 30, 2020. Mr. Rappaport is a managing member of Skyline Public Works, LLC, which is the general partner of SPWI, and in such capacity shares voting and dispositive power with respect to the shares held by SPWI.
- (11) Consists of 233,847 shares of common stock.
- (12) Consists of 584,618 shares of common stock issuable upon exercise of stock options held by Mr. Clark that are exercisable within 60 days of September 30, 2020.
- (13) Consists of (i) 106,564 shares of common stock held directly by Dr. McCormick, (ii) 426,261 shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock held directly by Dr. McCormick, (iii) 50,000 shares of common stock held by the Francis P. McCormick Revocable Trust dated January 27, 2017, (iv) 184,918 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by the Francis P. McCormick Revocable Trust dated January 27, 2017, and (v) 208,818 shares of common stock issuable upon exercise of stock options held by Dr. McCormick that are exercisable within 60 days of September 30, 2020. Dr. McCormick holds voting and investment power over the shares held by the trustee of Francis P. McCormick Revocable Trust dated January 27, 2017.
- (14) Consists of shares held by Logos Fund I and Logos Fund II disclosed in footnote 5 above. Dr. Walmsley is a managing member of Logos GP and shares voting and dispositive power with respect to the shares held by Logos Fund I and Logos Fund II.

- (15) Consists of (i) 9,165,739 shares of common stock held by our current directors and executive officers as a group, (ii) 2,718,000 shares of common stock issuable upon the conversion of Series A convertible preferred stock held by our current directors and executive officers as a group, (iii) 1,151,123 shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock held by our current directors and executive officers as a group, (iv) 3,905,326 shares of common stock issuable upon the conversion of Series B convertible preferred stock held by our current directors and executive officers as a group, (v) 3,298,523 shares of common stock issuable upon the conversion of Series C convertible preferred stock held by our current directors and executive officers as a group, and (vi) 4,576,639 shares of common stock issuable upon the exercise of stock options held by our current directors and executive officers that are exercisable within 60 days of September 30, 2020.

Description of capital stock

General

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 after the closing of this offering, and the amended and restated bylaws, which will become effective upon the closing of this offering. 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 closing of this offering.

Upon filing of our amended and restated certificate of incorporation and the closing of this offering, our authorized capital stock will consist of _____ shares of common stock, par value \$0.0001 per share, and _____ shares of preferred stock, par value \$0.0001 per share. All of our authorized shares of preferred stock will be undesignated.

As of September 30, 2020, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 66,257,144 shares of our common stock in connection with the closing of this offering and including 2,496,352 shares of our unvested restricted common stock subject to repurchase as of such date, there were 76,725,191 shares of common stock outstanding and held of record by 84 stockholders.

Common stock

Voting rights

The common stock is entitled to one vote per share on any matter that is submitted to a vote of our stockholders. Our amended and restated certificate of incorporation does not provide for cumulative voting for the election of directors. Our amended and restated certificate of incorporation establishes a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of our stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. The affirmative vote of holders of at least 66 ²/₃% of the voting power of all of the then-outstanding shares of capital stock, voting as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified structure of our board of directors, the size of our board of directors, removal of directors, director liability, vacancies on our board of directors, special meetings, stockholder notices, actions by written consent and exclusive jurisdiction.

Economic rights

Except as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law, all shares of common stock will have the same rights and privileges and rank equally, share ratably, and be identical in all respects for all matters, including those described below.

Dividends. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. See the section titled "Dividend Policy" for further information.

Liquidation rights. On our liquidation, dissolution, or winding-up, the holders of common stock will be entitled to share equally, identically, and ratably in all assets remaining after the payment of any liabilities, liquidation preferences and accrued or declared but unpaid dividends, if any, with respect to any outstanding preferred stock, unless a different treatment is approved by the affirmative vote of the holders of a majority of the outstanding shares of such affected class, voting separately as a class.

No preemptive or similar rights

The holders of our shares of common stock are not entitled to preemptive rights, and are not subject to conversion, redemption or sinking fund provisions.

Fully paid and non-assessable

In connection with this offering, our legal counsel will opine that the shares of our common stock to be issued under this offering will be fully paid and non-assessable.

Preferred stock

Upon the closing of this offering, all of our currently outstanding shares of convertible preferred stock will convert into common stock and we will not have any convertible preferred stock outstanding. Immediately after the closing of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of convertible preferred stock. Under the amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to _____ shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

Stock options

As of September 30, 2020, 6,986,227 shares of common stock were issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of \$1.49 per share. For additional information regarding terms of our equity incentive plans, see the section titled "Executive Compensation—Equity Benefit Plans."

Registration rights

Upon the closing of this offering and subject to the lock-up agreements entered into in connection with this offering and federal securities laws, certain holders of shares of our common stock, including those shares of our common stock that will be issued upon the conversion of our convertible preferred stock in connection with this offering, will initially be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of our Rights Agreement and are described in additional detail below. The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will expire no later than three years after the closing of this offering, or with respect to any particular holder, at such time that such holder can sell its shares under Rule 144 of the Securities Act during any three-month period.

Demand registration rights

Upon the closing of this offering, holders of an aggregate of approximately 66.2 million shares of our common stock will be entitled to certain demand registration rights. At any time beginning 180 days after the closing of this offering, the holders of 30% of these shares may request that we register all or a portion of their shares. We are not required to effect more than two registration statements which are declared or ordered effective. Such request for registration must cover shares with an anticipated aggregate offering price, net of expenses, of at least \$10 million. With certain exceptions, we are not required to effect the filing of a registration statement during the period starting with the date of the filing of, and ending on a date 180 days following the effective date of the registration statement for this offering.

Piggyback registration rights

In connection with this offering, the holders of an aggregate of approximately 66.2 million shares of our common stock were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. After this offering, in the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain piggyback registration rights allowing the holder to include their shares in such registration, subject to certain marketing and other limitations.

Form S-3 registration rights

Upon the closing of this offering, holders of an aggregate of approximately 66.2 million shares of common stock will be entitled to certain Form S-3 registration rights. Holders of 30% of these shares can make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3 and if the anticipated aggregate offering price, net of expenses, would equal or exceed \$2 million. We will not be required to effect more than two registrations on Form S-3 within any 12-month period.

Anti-takeover provisions

The provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws, which are summarized below, may have the effect of delaying, deferring or discouraging another person from acquiring control of our company. They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Certificate of incorporation and bylaws to be in effect in connection with this offering

Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the voting power of our shares of common stock will be able to elect all of our directors. Our amended and restated certificate of incorporation, to be effective immediately after the closing of this offering, and our amended and restated bylaws, to be effective on the closing of this offering, will provide for stockholder actions at a duly called meeting of stockholders or, before the date on which all shares of common stock convert into a single class, by written consent. A special meeting of stockholders may be called by a majority of our board of directors, the chair of our board of directors, or our chief executive officer or president. Our amended and restated bylaws will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors.

As described above in "Management—Composition of Our Board of Directors," in accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms.

The foregoing provisions will make it more difficult for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware general corporation law

When we have a class of voting stock that is either listed on a national securities exchange or held of record by more than 2,000 stockholders, we will be subject to Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, subject to certain exceptions.

Choice of forum

Our amended and restated certificate of incorporation to be effective immediately after the closing of this offering will provide that the Court of Chancery of the State of Delaware (or, if and only if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom is the sole and exclusive forum for the following claims or causes of action under the Delaware statutory or common law: (i) any derivative claim or cause of action brought on our behalf; (ii) any claim or cause of action for a breach of fiduciary duty owed by any of our current or former directors, officers, or other employees to us or our stockholders; (iii) any claim or cause of action against us or any of our current or former directors, officers or other employees arising out of or pursuant to any provision of the DGCL, our amended and restated certificate of incorporation, or our bylaws (as each may be amended from time to time); (iv) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws (as each may be amended from time to time, including any right, obligation, or remedy thereunder); (v) any claim or cause of action as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any claim or cause of action against us or any of our current or former directors, officers, or other employees governed by the internal-affairs doctrine or otherwise related to our internal affairs, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants. This choice of forum provision would not apply to claims or causes of action brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction, or the Securities Act. Our amended and restated certificate of incorporation to be effective on the closing of this offering will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Additionally, our amended and restated certificate of incorporation to be effective immediately after the closing of this offering 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 “Executive Compensation—Limitations on Liability and Indemnification.”

Exchange listing

Our common stock is currently not listed on any securities exchange. We have applied to have common stock approved for listing on The Nasdaq Global Market under the symbol “OLMA.”

Transfer agent and registrar

On the closing of this offering, the transfer agent and registrar for our common stock will be Computershare Trust Company, N.A.

Shares eligible for future sale

Before the closing of 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.

Based on our shares outstanding as of September 30, 2020, upon the closing of this offering, a total of shares of common stock will be outstanding, assuming the automatic conversion of all outstanding shares of our convertible preferred stock into 66,257,144 shares of our common stock in connection with the closing of this offering and 2,496,352 shares of unvested restricted common stock subject to repurchase. Of these shares, all of the common stock sold in this offering by us, plus any shares sold by us on exercise of the underwriters' option to purchase additional common stock, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144 under the Securities Act, or Rule 144.

The remaining shares of common stock will be, and shares of common stock subject to stock options will be on issuance, "restricted securities," as that term is defined in Rule 144. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. Restricted securities may also be sold outside of the United States to non-U.S. persons in accordance with Rule 904 of Regulation S.

Subject to the lock-up agreements described below and the provisions of Rule 144 or Regulation S under the Securities Act, as well as our insider trading policy, these restricted securities will be available for sale in the public market after the date of this prospectus.

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 common stock then outstanding, which will equal approximately shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares of 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 of the Securities Act, or 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.

Form S-8 registration statements

We intend to file one or more registration statements on Form S-8 under the Securities Act with the SEC to register the offer and sale of shares of our common stock that are issuable under our 2014 Plan, 2020 Plan and ESPP. These registration statements will become effective immediately on filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below, and Rule 144 limitations applicable to affiliates.

Lock-up arrangements

We, and all of our directors, executive officers and the holders of substantially all of our common stock and securities exercisable for or convertible into our common stock outstanding immediately on the closing of this offering, have agreed with the underwriters that, until 180 days after the date of the underwriting agreement related to this offering, we and they will not, without the prior written consent of the representatives of the underwriters, subject to certain exceptions, directly or indirectly, 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 any of our shares of common stock, or any securities convertible into or exercisable or exchangeable for shares of our common stock, or enter into any hedging, swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the securities, whether any such swap or transaction is to be settled by delivery of our common stock or other securities, in cash or otherwise. These agreements are described in "Underwriting." The representatives of the underwriters may, in their sole discretion, release any of the securities subject to these lock-up agreements at any time.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain security holders, including the Rights Agreement, our standard form of option agreement and our standard form of restricted stock agreement, that contain market stand-off provisions or incorporate market stand-off provisions from our equity incentive plan imposing restrictions on the ability of such security holders to offer, sell or transfer our equity securities for a period of 180 days following the date of this prospectus.

Registration rights

Upon the closing of this offering, pursuant to our Rights Agreement, the holders of shares of our common stock, or their transferees, will be entitled to certain rights with respect to the registration of the offer and sale of their shares under the Securities Act, subject to the terms of the lock-up agreements described under the section titled "—Lock-Up Arrangements" above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately on the effectiveness of the registration. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

Certain material U.S. federal income tax consequences to non-U.S. holders

The following is a summary of certain 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 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, and does not address any estate or gift tax consequences or any tax consequences arising under any state, local or foreign tax laws, or any other U.S. federal tax laws. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the Internal Revenue Service, or the IRS, all as in effect on the date of this prospectus. 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 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 does not address all of the U.S. federal income tax consequences that may be relevant to an individual 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 or other pass-through entities (and investors therein);
- “controlled foreign corporations”;
- “passive foreign investment companies”;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- banks, financial institutions, investment funds, insurance companies, brokers, dealers or traders in securities;
- tax-exempt organizations and governmental organizations;
- tax-qualified retirement plans;
- persons who acquire our common stock through the exercise of an option or otherwise as compensation;
- 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 subject to the alternative minimum tax;
- persons subject to special tax accounting rules under Section 451(b) 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 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 will generally 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 holding 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 FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

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 not a “U.S. holder” or a partnership (including any entity or arrangement treated as a partnership) for U.S. federal income tax purposes. A U.S. holder is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust (1) whose administration is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (2) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on our common stock

As described under the section titled “Dividend Policy,” we do not anticipate declaring or paying, in the foreseeable future, any cash distributions on our capital stock. However, if we 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 the section titled “—Gain on Disposition of Our Common Stock” below.

Subject to the discussion 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 dividends and must be updated periodically. In the case of a non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of the tax treaty, dividends will be treated as paid to the entity or to those holding an interest in the entity. 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 are attributable to such holder’s permanent establishment or fixed base in the United States if required by an applicable tax treaty), the non-U.S. holder will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a valid IRS Form W-8ECI (or applicable successor form) 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 of any excess amounts withheld by timely filing an appropriate claim for refund 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 discussion 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 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 present in the United States for 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, or a 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 during the calendar year in which the sale or other disposition occurs.

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 other trade or business assets and our foreign real property interests. 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.

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 (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. Gain described in the third bullet point above will generally be subject to U.S. federal income tax in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

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 dividends on our common stock paid to such holder and the amount of any tax withheld with respect to those dividends. These information reporting requirements apply even if no withholding was required because the dividends 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. 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 dividends 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 certain other requirements are met, 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 will impose a U.S. federal withholding tax of 30% on certain payments made to a non-financial foreign entity unless such entity provides the withholding agent a certification 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. The U.S. Treasury Department has released proposed regulations under FATCA providing for the elimination of the federal withholding tax of 30% applicable to gross proceeds of a sale or other disposition of our common stock. Under these proposed Treasury Regulations (which may be relied upon by taxpayers prior to finalization), FATCA will not apply to gross proceeds from sales or other dispositions of our common stock.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

Underwriting

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Jefferies LLC and Cowen and Company, 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 common stock listed next to its name in the following table:

| Name | Number of Shares |
|----------------------------|------------------|
| J.P. Morgan Securities LLC | |
| Jefferies LLC | |
| Cowen and Company, LLC | |
| Canaccord Genuity LLC | |
| Total | |

The underwriters are committed to purchase all the common shares 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 shares of 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. Any such dealers may resell shares to certain other brokers or dealers at a discount of up to \$ _____ per share from the initial public offering price. After the initial offering of the shares to the public, if all of the shares of 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 _____ additional shares of 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 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 \$. We have agreed to reimburse the underwriters for expenses of up to \$ relating to the clearance of this offering with the Financial Industry Regulatory Authority.

A prospectus in electronic format may be made available on the websites 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 (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, or submit to, or file with, the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exercisable or exchangeable for any shares of our common stock, or publicly disclose the intention to undertake any of the foregoing, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences associated with the ownership of any shares of common stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery 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, Jefferies LLC and Cowen and Company, 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 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; or; (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 the company's employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the closing of this offering and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters.

Our directors, executive officers, and substantially all of our shareholders (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, Jefferies LLC and Cowen and Company, LLC, (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 such lock-up parties 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, "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. 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 (by any person or entity, whether or not a signatory to such agreement) 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 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 of lock-up securities: (i) as bona fide gifts, or for bona fide estate planning purposes, (ii) by will, other testamentary document or intestacy, (iii) to any trust for the direct or indirect benefit of the lock-up party or any immediate family member, or if the lock-up party is a trust, to a trustor or beneficiary of the trust or to the estate of a beneficiary of such trust (for purposes of the lock-up 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 partnership, limited liability company or other entity of which the lock-up party or its immediate family members are the legal and beneficial owner of all of the outstanding equity securities or similar interests, (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), (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 with the lock-up party or its affiliates, (including, for the avoidance of doubt, where the lock-up party 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, transfer or disposition without consideration by the lock-up party to members or stockholders, partners, members beneficiaries or other equity holders of the lock-up party; (vii) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree, separation agreement or other court order, (viii) to us (A) from an employee or other service provider upon death, disability or termination of employment or service, in each case of such employee or service provider or (B) pursuant to an agreement under which we have a right of first refusal with respect to transfers of the lock-up securities, (ix) as part of a sale of lock-up securities acquired in this offering (other than any Company-directed securities acquired in this offering by an executive officer or director) or in open market transactions after the closing of this offering, (x) to us in connection with the vesting, settlement or exercise of restricted stock units, 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 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 the lock-up agreement, and provided further that any such restricted stock units, options, warrants or rights are held by the lock-up party 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 this registration statement, 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 the registration statement, the pricing disclosure package and 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 by lock-up parties of trading plans under Rule 10b5-1 under the Exchange Act, provided that such plan does not provide for the transfer of lock-up securities during the restricted period.

J.P. Morgan Securities LLC, Jefferies LLC and Cowen and Company, LLC, in their 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 of 1933.

We have applied to list our common stock on The Nasdaq Global Market under the symbol "OLMA."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of 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 common stock than they are required to purchase in this offering, and purchasing shares of 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 The Nasdaq Global Market, 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 our common shares, 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 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 the European Economic Area and the United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (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:

- (a) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or

(c) 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 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

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 Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (“SIX”) or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us or the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (“CISA”). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in Australia

This document:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (the “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 under this document 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 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 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) (the “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) (the “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

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, we have has determined, and hereby notify all relevant

persons (as defined in Section 309A(1) of the SFA), that the shares 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).

Each representative has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each representative 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:

- (a) 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 (the “SFA”)) pursuant to Section 274 of the SFA;
- (b) 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
- (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) 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

(b) 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)(i)(B) 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.

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 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 (the "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 (the "FETL"). The shares have not been listed on any of securities exchanges in the world including, without limitation, the Korea Exchange in Korea. 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 Licence 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 authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

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 Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority

("CMA") pursuant to resolution number 2-11-2004 dated October 4, 2004 as amended by resolution number 1-28-2008, as amended (the "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 authorized financial adviser.

Notice to Prospective Investors in Qatar

The shares described in this prospectus have not been, and will not be, offered, sold or delivered, at any time, directly or indirectly in the State of Qatar in a manner that would constitute a public offering. This prospectus has not been, and will not be, registered with or approved by the Qatar Financial Markets Authority or Qatar Central Bank and may not be publicly distributed. This prospectus is intended for the original recipient only and must not be provided to any other person. It is not for general circulation in the State of Qatar and may not be reproduced or used for any other purpose.

Notice to Prospective Investors in the Dubai International Financial Centre ("DIFC")

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority ("DFSA"). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement 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 or the Dubai Financial Services Authority.

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 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 the Issuer. 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 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.

No South African residents or offshore subsidiary of a South African resident may subscribe for or purchase any of the shares or beneficially own or hold any of the shares unless specific approval has been obtained from the financial surveillance department of the South African Reserve Bank (the "SARB") by such persons or such subscription, purchase or beneficial holding or ownership is otherwise permitted under the South African Exchange Control Regulations or the rulings promulgated thereunder (including, without limitation, the rulings issued by the SARB providing for foreign investment allowances applicable to persons who are residents of South Africa under the applicable exchange control laws of South Africa).

Notice to Prospective Investors in Chile

THESE SECURITIES ARE PRIVATELY OFFERED IN CHILE PURSUANT TO THE PROVISIONS OF LAW 18,045, THE SECURITIES MARKET LAW OF CHILE, AND NORMA DE CARÁCTER GENERAL NO. 336 ("RULE 336"), DATED JUNE 27, 2012, ISSUED BY THE SUPERINTENDENCIA DE VALORES Y SEGUROS DE CHILE ("SVS"), THE SECURITIES REGULATOR OF CHILE, TO RESIDENT QUALIFIED INVESTORS THAT ARE LISTED IN RULE 336 AND FURTHER DEFINED IN RULE 216 OF JUNE 12, 2008 ISSUED BY THE SVS.

PURSUANT TO RULE 336 THE FOLLOWING INFORMATION IS PROVIDED IN CHILE TO PROSPECTIVE RESIDENT INVESTORS IN THE OFFERED SECURITIES:

1. THE INITIATION OF THE OFFER IN CHILE IS
2. THE OFFER IS SUBJECT TO NCG 336 OF JUNE 27, 2012 ISSUED BY THE SUPERINTENDENCIA DE VALORES Y SEGUROS DE CHILE (SUPERINTENDENCY OF SECURITIES AND INSURANCE OF CHILE).
3. THE OFFER REFERS TO SECURITIES THAT ARE NOT REGISTERED IN THE REGISTRO DE VALORES (SECURITIES REGISTRY) OR THE REGISTRO DE VALORES EXTRANJEROS (FOREIGN SECURITIES REGISTRY) OF THE SVS AND THEREFORE:
 - a. THE SECURITIES ARE NOT SUBJECT TO THE OVERSIGHT OF THE SVS; AND
 - b. THERE ISSUER THEREOF IS NOT SUBJECT TO REPORTING OBLIGATION WITH RESPECT TO ITSELF OR THE OFFERED SECURITIES.
4. THE SECURITIES MAY NOT BE PUBLICLY OFFERED IN CHILE UNLESS AND UNTIL THEY ARE REGISTERED IN THE SECURITIES REGISTRY OF THE SVS.

INFORMACIÓN A LOS INVERSIONISTAS RESIDENTES EN CHILE

LOS VALORES OBJETO DE ESTA OFERTA SE OFRECEN PRIVADAMENTE EN CHILE DE CONFORMIDAD CON LAS DISPOSICIONES DE LA LEY N° 18.045 DE MERCADO DE VALORES, Y LA NORMA DE CARÁCTER GENERAL N° 336 DE 27 DE JUNIO DE 2012 ("NCG 336") EMITIDA POR LA SUPERINTENDENCIA DE VALORES Y SEGUROS DE CHILE, A LOS "INVERSIONISTAS CALIFICADOS" QUE ENUMERA LA NCG 336 Y QUE SE DEFINEN EN LA NORMA DE CARÁCTER GENERAL N° 216 DE 12 DE JUNIO DE 2008 EMITIDA POR LA MISMA SUPERINTENDENCIA.

EN CUMPLIMIENTO DE LA NCG 336, LA SIGUIENTE INFORMACIÓN SE PROPORCIONA A LOS POTENCIALES INVERSIONISTAS RESIDENTES EN CHILE:

1. LA OFERTA DE ESTOS VALORES EN CHILE COMIENZA EL DÍA _____ DE _____ DE _____
2. LA OFERTA SE ENCUENTRA ACOGIDA A LA NCG 336 DE FECHA ECHA 27 DE JUNIO DE 2012 EMITIDA POR LA SUPERINTENDENCIA DE VALORES Y SEGUROS.
3. LA OFERTA VERSA SOBRE VALORES QUE NO SE ENCUENTRAN INSCRITOS EN EL REGISTRO DE VALORES NI EN EL REGISTRO DE VALORES EXTRANJEROS QUE LLEVA LA SUPERINTENDENCIA DE VALORES Y SEGUROS, POR LO QUE:
 - a) LOS VALORES NO ESTÁN SUJETOS A LA FISCALIZACIÓN DE ESA SUPERINTENDENCIA; Y
 - b) EL EMISOR DE LOS VALORES NO ESTÁ SUJETO A LA OBLIGACIÓN DE ENTREGAR INFORMACIÓN PÚBLICA SOBRE LOS VALORES OFRECIDOS NI SU EMISOR.
4. LOS VALORES PRIVADAMENTE OFRECIDOS NO PODRÁN SER OBJETO DE OFERTA PÚBLICA EN CHILE MIENTRAS NO SEAN INSCRITOS EN EL REGISTRO DE VALORES CORRESPONDIENTE.

Notice to Prospective Investors in Brazil

For purposes of Brazilian law, this offer of securities is addressed to you personally, upon your request and for your sole benefit, and is not to be transmitted to anyone else, to be relied upon elsewhere or for any other purpose either quoted or referred to in any other public or private document or to be filed with anyone, without our prior express and written consent.

This offering does not constitute or form part of any public offering of shares in Brazil and, accordingly, has not been and will not be registered under Brazilian Federal Law No. 6385 of December 7, 1976, as amended, Brazilian Securities Commission (CVM) Rule (Instrução) No. 400 of December 29, 2003, as amended, or under any other Brazilian securities law or regulation. Furthermore, our shares and we have not been and will not be registered before the CVM under CVM Rule (Instrução) No. 480 of December 7, 2009, as amended.

Therefore, the shares offered hereby have not been, will not be and may not be offered for sale or sold in Brazil except in circumstances that do not constitute a public offering or other unauthorized distribution under applicable Brazilian laws and regulations. Documents relating to the shares, as well as the information contained therein, may not be supplied to the public as a public offering in Brazil or be used in connection with any offer for subscription or sale of the shares to the public in Brazil.

Notice to Prospective Investors in the Cayman Islands

No invitation, whether directly or indirectly, may be made to the public in the Cayman Islands to subscribe for our securities.

Notice to Prospective Investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Notice to Prospective Investors in Kuwait

Unless all necessary approvals from the Kuwait Capital Markets Authority pursuant to Law No. 7/2010, its Executive Regulations, and the various Resolutions and Announcements issued pursuant thereto or in connection therewith have been given in relation to the marketing of and sale of the shares, these may not be offered for sale, nor sold in the State of Kuwait ("Kuwait"). Neither this prospectus nor any of the information contained herein is intended to lead to the conclusion of any contract of whatsoever nature within Kuwait. With regard to the contents of this document we recommend that you consult a licensee as per the law and specialized in giving advice about the purchase of shares and other securities before making the subscription decision.

Legal matters

The validity of the shares of our common stock being offered in this prospectus will be passed upon for us by Cooley LLP, San Francisco, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Davis Polk & Wardwell LLP, Menlo Park, California.

Experts

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements at December 31, 2019 and 2018, and for each of the two years in the period ended December 31, 2019, as set forth in their report. We've 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 additional information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC also maintains an internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

On the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above.

We also maintain a website at www.olema.com. Information contained in, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only as an inactive textual reference.

Olema Pharmaceuticals, Inc. Index to financial statements

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Report of independent registered public accounting firm

To the Stockholders and the Board of Directors of
Olema Pharmaceuticals, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Olema Pharmaceuticals, Inc. (the Company) as of December 31, 2018 and 2019, and the related statements of operations and comprehensive loss, 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, 2018 and 2019, 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 and in accordance with auditing standards generally accepted in the United States of America. 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.

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 2020.

Redwood City, California
September 18, 2020

Olema Pharmaceuticals, Inc.
Balance Sheets
(Amounts in thousands, except share and per share amounts)

| | December 31, | | September 30, | |
|--|--------------|--------|---------------|-------------|
| | 2018 | 2019 | 2020 | 2020 |
| | | | (unaudited) | (unaudited) |
| Pro Forma Stockholders' Equity as of | | | | |
| December 31, September 30, September 30, 2020 | | | | |
| Assets | | | | |
| Current assets: | | | | |
| Cash and cash equivalents | \$3,149 | \$ 68 | \$ 127,824 | \$ |
| Prepaid expenses and other current assets | 93 | 35 | 1,263 | |
| Total current assets | 3,242 | 103 | 129,087 | |
| Property and equipment, net | 26 | 26 | 24 | |
| Deferred offering costs | — | — | 1,476 | |
| Other assets | 3 | 3 | 96 | |
| Total assets | \$3,271 | \$ 132 | \$ 130,683 | \$ |
| Liabilities, convertible preferred stock and stockholders' equity (deficit) | | | | |
| Current liabilities: | | | | |
| Accounts payable | \$ 116 | \$ 935 | \$ 97 | \$ |
| Other current liabilities | 85 | 443 | 5,176 | |
| Total current liabilities | 201 | 1,378 | 5,273 | |
| Total liabilities | 201 | 1,378 | 5,273 | |
| Commitments and Contingencies (Note 12) | | | | |
| Convertible preferred stock (Series A, A-1, B, and C), \$0.0001 par value; 12,903,514, 12,903,514 and 66,897,006 shares authorized as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively; 12,903,514, 12,903,514 and 66,257,144 shares issued and outstanding as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively; aggregate liquidation preference of \$9,432, \$9,432 and \$150,350 as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively; no shares issued or outstanding, pro forma as of September 30, 2020 (unaudited) | 9,348 | 9,348 | 148,373 | — |
| Stockholders' equity (deficit): | | | | |

| | December 31, | | September 30, | Pro Forma Stockholders' Equity as of September 30, |
|--|--------------|----------|---------------|---|
| | 2018 | 2019 | 2020 | 2020 |
| | | | (unaudited) | (unaudited) |
| Common stock, \$0.0001 par value; 22,000,000, 22,000,000 and 88,000,000 shares authorized as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively; 7,820,200, 7,820,000 and 10,468,047 shares issued as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively ; 7,230,200, 7,230,200 and 7,971,695 shares outstanding as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), respectively; 76,725,191 shares issued and 74,228,839 shares outstanding, pro forma as of September 30, 2020 (unaudited) | 1 | 1 | 1 | 7 |
| Additional paid-in capital | 167 | 167 | — | 148,367 |
| Accumulated deficit | (6,446) | (10,762) | (22,964) | (22,964) |
| Total stockholders' equity (deficit) | (6,278) | (10,594) | (22,963) | 125,410 |
| Total liabilities, convertible preferred stock and stockholders' equity (deficit) | \$ 3,271 | \$ 132 | \$ 130,683 | \$ 130,683 |

See accompanying notes to the financial statements.

Olema Pharmaceuticals, Inc.
Statements of operations and comprehensive loss
(Amounts in thousands, except share and per share amounts)

| | Years Ended December 31, | | Nine Months Ended September 30, | |
|---|--------------------------|------------|---------------------------------|------------|
| | 2018 | 2019 | 2019 | 2020 |
| | | | (unaudited) | |
| Operating expenses: | | | | |
| Research and development | \$ 1,693 | \$ 3,920 | \$ 3,010 | \$ 7,415 |
| General and administrative | 386 | 403 | 296 | 3,982 |
| Total operating expenses | 2,079 | 4,323 | 3,306 | 11,397 |
| Loss from operations | (2,079) | (4,323) | (3,306) | (11,397) |
| Other (expense) income: | | | | |
| Interest income | 4 | 7 | 7 | 59 |
| Interest expense | (28) | — | — | (653) |
| Other income | — | — | — | 1 |
| Loss on extinguishment of convertible notes | (63) | — | — | — |
| Loss on remeasurement of convertible notes | (31) | — | — | — |
| Total other (expense) income, net | (118) | 7 | 7 | (593) |
| Net loss and comprehensive loss | \$ (2,197) | \$ (4,316) | (3,299) | (11,990) |
| Repurchase and retirement of Series A and Series A-1 convertible preferred stock | — | — | — | (1,869) |
| Net loss attributable to common stockholders | \$ (2,197) | \$ (4,316) | (3,299) | (13,859) |
| Net loss per share attributable to common stockholders, basic and diluted | \$ (0.31) | \$ (0.60) | (0.46) | (1.90) |
| Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted | 7,032,974 | 7,230,200 | 7,230,200 | 7,297,745 |
| Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) | | \$ (0.21) | \$ | (0.35) |
| Weighted average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) | | 20,133,714 | | 39,306,921 |

See accompanying notes to the financial statements.

Olema Pharmaceuticals, Inc.
Statements of convertible preferred stock and
stockholders' deficit
(Amounts in thousands, except share amounts)

| | Convertible Preferred Stock | | Common Stock | | Additional Paid-in Capital | Accumulated Deficit | Total Stockholders' Deficit |
|--|-----------------------------|------------|--------------|--------|----------------------------|---------------------|-----------------------------|
| | Shares | Amount | Shares | Amount | | | |
| Balances at December 31, 2017 | 4,640,126 | \$ 3,377 | 6,870,263 | \$ 1 | \$ 72 | \$ (4,249) | \$ (4,176) |
| Issuance of Series A-1 convertible preferred stock, net of issuance costs of \$68 | 6,824,075 | 4,931 | — | — | — | — | — |
| Issuance of Series A-1 convertible preferred stock in connection with convertible notes, net of issuance costs of \$15 | 1,439,313 | 1,040 | — | — | — | — | — |
| Issuance of common stock upon conversion of convertible notes, net of issuance costs of \$1 | — | — | 359,937 | — | 94 | — | 94 |
| Stock-based compensation expense | — | — | — | — | 1 | — | 1 |
| Net loss and comprehensive loss | — | — | — | — | — | (2,197) | (2,197) |
| Balances at December 31, 2018 | 12,903,514 | 9,348 | 7,230,200 | 1 | 167 | (6,446) | (6,278) |
| Net loss and comprehensive loss | — | — | — | — | — | (4,316) | (4,316) |
| Balances at December 31, 2019 | 12,903,514 | 9,348 | 7,230,200 | 1 | 167 | (10,762) | (10,594) |
| Beneficial conversion option recognized upon issuance of 2020 convertible notes | — | — | — | — | 1,054 | — | 1,054 |
| Beneficial conversion option recognized upon repurchase of 2020 convertible notes on settlement date | — | — | — | — | (2,568) | — | (2,568) |
| Extinguishment of 2020 convertible notes | — | — | — | — | 2,148 | — | 2,148 |
| Issuance of Series B convertible preferred stock, net of issuance costs of \$256 | 30,113,990 | 50,637 | — | — | — | — | — |
| Issuance of Series B convertible preferred stock in connection with the conversion of convertible notes | 1,779,502 | 3,007 | — | — | — | — | — |
| Repurchase and retirement of Series A and Series A-1 convertible preferred stock | (576,626) | (420) | — | — | (1,657) | (212) | (1,869) |
| Issuance of Series C convertible preferred stock, net of issuance costs of \$1,637 | 22,036,764 | 85,801 | — | — | — | — | — |
| Exercise of stock options | — | — | 666,495 | — | 120 | — | 120 |
| Vesting of restricted stock awards | — | — | 75,000 | — | — | — | — |
| Stock-based compensation expense | — | — | — | — | 736 | — | 736 |
| Net loss and comprehensive loss | — | — | — | — | — | (11,990) | (11,990) |
| Balances at September 30, 2020 (unaudited) | 66,257,144 | \$ 148,373 | 7,971,695 | \$ 1 | \$ — | \$ (22,964) | \$ (22,963) |
| Balances at December 31, 2018 | 12,903,514 | 9,348 | 7,230,200 | 1 | 167 | (6,446) | (6,278) |
| Net loss and comprehensive loss | — | — | — | — | — | (3,299) | (3,299) |
| Balances at September 30, 2019 (unaudited) | 12,903,514 | 9,348 | 7,230,200 | 1 | 167 | (9,745) | (9,577) |

See accompanying notes to the financial statements.

Olema Pharmaceuticals, Inc. Statements of cash flows (Amounts in thousands)

| | Nine Months Ended | | | |
|--|---------------------------------|----------------|----------------|--------------------------------------|
| | Year Ended December 31, 2018 | 2019 | 2019 | September 30, 2020 (unaudited) |
| Cash flows from operating activities: | | | | |
| Net loss | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (11,990) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | | |
| Depreciation and amortization expense | 8 | 9 | 6 | 7 |
| Non-cash interest expense | 28 | — | — | 641 |
| Stock-based compensation expense | 1 | — | — | 736 |
| Loss on extinguishment of convertible notes | 63 | — | — | — |
| Loss on remeasurement of convertible notes | 31 | — | — | — |
| Changes in operating assets and liabilities: | | | | |
| Prepaid expenses, other current assets and other assets | (78) | 58 | 15 | (1,321) |
| Accounts payable and other current liabilities | (32) | 1,168 | 1,045 | 1,074 |
| Net cash used in operating activities | (2,176) | (3,081) | (2,233) | (10,853) |
| Cash flows from investing activities: | | | | |
| Purchase of equipment | — | — | — | (5) |
| Net cash used in investing activities | — | — | — | (5) |
| Cash flows from financing activities: | | | | |
| Proceeds from the issuance of convertible notes | 323 | — | — | 3,000 |
| Proceeds from issuance of Series A-1 convertible preferred stock, net of issuance costs | 4,931 | — | — | — |
| Proceeds from issuance of Series B convertible preferred stock, net of issuance costs | — | — | — | 50,637 |
| Proceeds from issuance of Series C convertible preferred stock, net of issuance costs | — | — | — | 87,427 |
| Repurchase of shares of Series A and Series A-1 convertible preferred stock | — | — | — | (2,289) |
| Exercise of stock options | — | — | — | 640 |
| Proceeds from the settlement of non-recourse notes | — | — | — | 88 |
| Payments of costs related to initial public offering | — | — | — | (889) |
| Net cash provided by financing activities | 5,254 | — | — | 138,614 |
| Net increase (decrease) in cash and cash equivalents | 3,078 | (3,081) | (2,233) | 127,756 |
| Cash and cash equivalents at beginning of period | 71 | 3,149 | 3,149 | 68 |
| Cash and cash equivalents at end of period | \$ 3,149 | \$ 68 | \$ 916 | \$ 127,824 |
| Supplemental disclosure of non-cash investing and financing activities: | | | | |
| Conversion of convertible notes and accrued interest into Series A-1 convertible preferred stock | \$ 1,040 | \$ — | \$ — | \$ — |
| Purchases of property and equipment included in accounts payable | \$ — | \$ 9 | \$ — | \$ — |
| Conversion of convertible notes into Series B convertible preferred stock | \$ — | \$ — | \$ — | \$ 3,007 |
| Deferred offering costs included in other current liabilities | \$ — | \$ — | \$ — | \$ 587 |
| Series C convertible preferred stock issuance costs included in other current liabilities | \$ — | \$ — | \$ — | \$ 1,626 |

See accompanying notes to the financial statements.

Olema Pharmaceuticals, Inc.

Notes to financial statements

1. Nature of the Business and Basis of Presentation

Olema Pharmaceuticals Inc. ("Olema" or the "Company") is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of next generation targeted therapies for women's cancers. The Company is initially focused on developing therapies for the treatment of breast cancer. The Company's wholly owned, lead product candidate, OP-1250, is a novel oral therapy with combined activity as both a complete ER antagonist and a selective ER degrader. The Company is currently evaluating OP-1250 in a Phase 1/2 dose escalation and expansion trial for the treatment of recurrent, locally advanced or metastatic estrogen receptor-positive human epidermal growth factor receptor 2-negative breast cancer.

The Company is located in San Francisco, California and was incorporated in Delaware on August 7, 2006 under the legal name of CombiThera, Inc. and on March 25, 2009 was renamed to Olema Pharmaceuticals, Inc. All of the Company's tangible assets are held in the United States ("U.S.").

The Company is subject to risks and uncertainties common to early-stage companies in the biopharmaceutical industry, including, but not limited to, successful discovery and development of its product candidates, development by competitors of new technological innovations, dependence on key personnel, the ability to attract and retain qualified employees, protection of proprietary technology, compliance with governmental regulations, the impact of the COVID-19 coronavirus, the ability to secure additional capital to fund operations and commercial success of its product candidates. OP-1250 and any future product candidates the Company may develop will require extensive nonclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel, and infrastructure and extensive compliance-reporting capabilities. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

Need for Additional Capital

Since inception, the Company has incurred net losses and negative cash flows from operations, including net losses of \$2.2 million and \$4.3 million during the years ended December 31, 2018 and 2019, respectively, and \$3.3 million and \$12.0 million for the nine months ended September 30, 2019 and 2020 (unaudited), respectively. As of December 31, 2019 and September 30, 2020 (unaudited), the Company had an accumulated deficit of \$10.8 million and \$23.0 million, respectively, and expects to incur substantial operating losses and negative cash flows from operations for the foreseeable future. The Company had \$0.1 million and \$127.8 million of cash and cash equivalents at December 31, 2019 and September 30, 2020 (unaudited), respectively. During the nine months ended September 30, 2020 (unaudited) the Company raised \$50.9 million and \$87.4 million of gross proceeds in connection with the issuance of its Series B convertible preferred stock and Series C convertible preferred stock (see Note 7, "Convertible Preferred Stock"), respectively, which management believes is sufficient to fund its operating expenses and capital expenditure requirements for at least 12 months from the issuance date of these financial statements. The future viability of the Company beyond that point is dependent on its ability to raise additional capital to finance operations. The Company is seeking to complete an initial public offering ("IPO") of its common stock. In the event the Company does not complete an IPO, the Company expects to seek additional funding through private equity financings, debt financings or other capital sources, including collaborations with other companies or other strategic transactions. The Company may not be able to obtain financing on acceptable terms, or at all. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders.

If the Company is unable to obtain funding, the Company will be forced to delay, reduce or eliminate some or all of its research and development programs which could adversely affect its business prospects, or the Company may be unable to continue operations. Although management continues to pursue these plans, there is no assurance

that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

Impact of the COVID-19 Coronavirus

The COVID-19 pandemic continues to rapidly evolve. The extent of the impact of the COVID-19 pandemic on the Company's business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on the Company's development activities, planned clinical trial enrollment, future trial sites, CROs, third-party manufacturers, and other third parties with whom the Company does business, as well as its impact on regulatory authorities and the Company's key scientific and management personnel. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. To the extent possible, the Company is conducting business as usual, with necessary or advisable modifications to employee travel and with the Company's employees working remotely. The Company will continue to actively monitor the rapidly evolving situation related to the COVID-19 pandemic and may take further actions that alter the Company's operations, including those that may be required by federal, state or local authorities, or that the Company determines are in the best interests of its employees and other third parties with whom the Company does business. At this point, the extent to which the COVID-19 pandemic may affect the Company's business, operations and development timelines and plans, including the resulting impact on expenditures and capital needs, remains uncertain.

Basis of Presentation

The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

The accompanying balance sheet as of September 30, 2020, the statements of operations and comprehensive loss and of cash flows for the nine months ended September 30, 2019 and 2020, and the statement of convertible preferred stock and stockholders' equity (deficit) for the nine months ended September 30, 2020 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of September 30, 2020 and the results of its operations and its cash flows for the nine months ended September 30, 2019 and 2020. The financial data and other information disclosed in these notes related to the nine months ended September 30, 2019 and 2020 are unaudited. The results for the nine months ended September 30, 2020 are not necessarily indicative of results to be expected for the year ending December 31, 2020, any other interim periods, or any future year or period.

2. Summary of Significant Accounting Policies

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 at the date of the financial statements and reported amounts of expenses during the reporting period. Such estimates include the determination of useful lives for equipment, accruals of research and development expenses, accrual of research contract costs, preferred and common stock and stock option valuations. On an ongoing basis, the Company evaluates its estimates and judgments, which are based on historical and anticipated results and trends and on various other assumptions that management believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Unaudited Pro Forma Information

Upon the completion of an IPO, all outstanding shares of convertible preferred stock will automatically convert into shares of common stock. Unaudited pro forma balance sheet information as of September 30, 2020 assumes the conversion of all outstanding shares of convertible preferred stock into 66,257,144 shares of common stock. The shares of common stock issuable and any proceeds expected to be received in an IPO are excluded from such pro forma financial information. The unaudited pro forma basic and diluted net loss per common share has been computed to give effect to the conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed IPO had occurred on the later of January 1, 2019 or the issuance date of the convertible preferred stock. The unaudited pro forma net loss per common share does not include the common shares expected to be sold and related proceeds to be received from an IPO.

Cash and Cash Equivalents

Cash and cash equivalents are defined as short-term, highly liquid investments with original maturities of 90 days or less at the date of purchase. Cash deposits are all in reputable financial institutions in the U.S. and as of December 31, 2018 and 2019 and September 30, 2020 (unaudited), cash and cash equivalents consisted of cash on deposit with U.S. banks denominated in U.S. dollars and investments in interest bearing money market funds.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash and cash equivalents. The Company invests its excess cash with large financial institutions. At times, the Company's cash balances with individual banking institutions will exceed the limits insured by the FDIC, however, the Company has not experienced any losses on such deposits.

The Company's future results of operations involve a number of other risks and uncertainties. Factors that could affect the Company's future operating results and cause actual results to vary materially from expectations include, but are not limited to, uncertainty of results of clinical trials and reaching milestones, uncertainty of regulatory approval of the Company's current and potential future product candidates, uncertainty of market acceptance of the Company's product candidates, competition from substitute products and larger companies, securing and protecting proprietary technology, strategic relationships and dependence on key individuals or sole-source suppliers.

The Company's product candidates require approvals from the U.S. Food and Drug Administration and comparable foreign regulatory agencies prior to commercial sales in their respective jurisdictions. There can be no assurance that any product candidates will receive the necessary approvals. If the Company was denied approval, approval was delayed or the Company was unable to maintain approval for any product candidate, it could have a materially adverse impact on the Company.

Deferred Offering Costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded as a reduction to the carrying value of additional paid-in capital generated as a result of such offering. Should an in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the statements of operations and comprehensive loss. As of December 31, 2018 and 2019, the Company did not have any deferred offering costs. As of September 30, 2020 (unaudited), the Company had recorded \$1.5 million of deferred offering costs related to its planned IPO.

Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The three levels of inputs that may be used to measure fair value are defined below:

- Level 1 — Quoted prices in active markets for identical assets or liabilities.

- Level 2 — Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, such as quoted prices for similar assets or liabilities, quoted prices 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 assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The carrying values of the Company's other assets, accounts payable and other current liabilities approximate their fair values due to the short-term nature of these assets and liabilities.

Segment Information

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development expenses consist of costs incurred to discover, research and develop product candidates, including personnel expenses, stock-based compensation expense, allocated facility-related and depreciation expenses, third-party license fees and external costs including fees paid to consultants and clinical research organizations ("CROs"), in connection with nonclinical studies and clinical trials, and other related clinical trial fees, such as for investigator grants, patient screening, laboratory work, clinical trial database management, clinical trial material management and statistical compilation and analysis. Non-refundable prepayments for goods or services that will be used or rendered for future research and development activities are recorded as prepaid expenses. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered, or the services rendered.

Costs incurred in obtaining technology licenses are charged immediately to research and development expense if the technology licensed has not reached technological feasibility and has no alternative future uses.

Research Contract Costs and Accruals

The Company has from time to time entered into various research and development and other agreements with commercial firms, researchers, universities and others for provisions of goods and services. These agreements are generally cancelable, and the related costs are recorded as research and development expenses as incurred. The Company records accruals for estimated ongoing research and development costs. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the studies or clinical trials, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ materially from the Company's estimates. The Company's historical accrual estimates have not been materially different from the actual costs.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives. The general range of useful lives of equipment are as follows:

| | Estimated Useful Life |
|--------------------|------------------------------|
| Lab equipment | 5 – 7 years |
| Computer equipment | 5 years |

When assets are sold or retired, the cost and related accumulated depreciation are removed from the accounts, with any resulting gain or loss recorded in operating expenses in the statements of operations and comprehensive loss. Costs of repairs and maintenance are expensed as incurred.

Impairment of Long-Lived Assets

The Company's long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset or asset group may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset or asset group to the future undiscounted cash flows expected to be generated by the asset or asset group. If such asset is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value. As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company has not recorded any impairment losses on its long-lived assets.

Income Taxes

Income taxes are computed using the asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements. In estimating future tax consequences, the Company considers all expected future events other than enactment of changes in tax laws or rates. A valuation allowance is recorded, if necessary, to reduce net deferred tax assets to their realizable values if management does not believe it is more likely than not that the net deferred tax assets will be realized. As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company has recorded a full valuation allowance against its net deferred tax assets.

The Company follows the provisions of the authoritative guidance from the Financial Accounting Standards Board, ("FASB"), on accounting for uncertainty in income taxes. These provisions provide a comprehensive model for the recognition, measurement and disclosure in financial statements of uncertain income tax positions that a company has taken or expects to take on a tax return. Under these provisions, a company can recognize the benefit of an income tax position only if it is more likely than not (greater than 50%) that the tax position will be sustained upon tax examination, based solely on the technical merits of the tax position. Otherwise, no benefit can be recognized. Assessing an uncertain tax position begins with the initial determination of the sustainability of the position and is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed. Additionally, the Company must accrue interest and related penalties, if applicable, on all tax exposures for which reserves have been established consistent with jurisdictional tax laws.

The Company has analyzed its filing positions in all significant Federal and state jurisdictions where it is required to file income tax returns, as well as open tax years in these jurisdictions. The Company had no unrecognized tax benefits for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2020 (unaudited), respectively. With few exceptions, the Company is no longer subject to U.S. Federal, state, and local tax examinations by tax authorities for years before 2016, although carry-forward attributes that were generated prior to 2019 may still be adjusted upon examination by the taxing authorities if they either have been or will be used in a future period (see Note 10, "Income Taxes").

The Company's policy is to recognize interest and penalties related to uncertain tax positions in the provision for income taxes. As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company had no accrued interest or penalties related to uncertain tax positions

Common Stock Valuation

Due to the absence of an active market for the Company's common stock, the Company utilized 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. In determining the fair value of options granted, the Company has considered the estimated fair value of the common stock as of the measurement date. The estimated fair value of the common stock has been determined at each grant date based upon a variety of factors, including:

- the prices at which the Company sold shares of convertible preferred stock and the superior rights and preferences of the convertible preferred stock relative to its common stock at the time of each grant;
- the progress of the Company's research and development programs, including the status and results of nonclinical studies for its product candidates;
- the Company's stage of development and commercialization and its business strategy;
- external market conditions affecting the biotechnology industry and trends within the biotechnology industry;
- the Company's financial position, including cash on hand, and its historical and forecasted performance and operating results;
- the lack of an active public market for the Company's common stock and convertible preferred stock;
- the likelihood of achieving a liquidity event, such as an IPO or sale of the Company in light of prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the biotechnology industry.

Significant changes to the key assumptions underlying the factors used could have resulted in different fair values of common stock at each valuation date.

Comprehensive Loss

There was no difference between net loss and comprehensive loss for each of the periods presented in the accompanying financial statements.

Stock-Based Compensation

All stock-based compensation cost, including grants of stock options and restricted stock awards issued under the Company's equity incentive plan, is measured at the grant date based on the fair value of the award and is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. The Company recognizes stock compensation in accordance with ASC 718, Compensation — Stock Compensation ("ASC 718"). ASC 718 requires the recognition of compensation expense, using a fair-value-based method, for costs related to all share-based payments including stock options. ASC 718 requires companies to estimate the fair value of share-based payment awards on the date of grant. The Company's determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model. The Company estimates the expected option lives using historical data, volatility using stock prices of peer companies, risk-free rates using the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equal to the expected term, and dividend yield using the Company's expectations and historical data. The Company uses the simplified method to calculate the expected term of employee stock option grants. Under the simplified method, the expected term is estimated to be the mid-point between the vesting date and the contractual term of the option. For awards with graded vesting, in which specified tranches of the options vest on different dates, the Company uses a single weighted average expected life to value the entire award, which is

equal to the average of the weighted average vesting period of the award and the contractual term of the award. The fair value of each stock option grant is calculated based upon the Company's common stock valuation on the date of the grant. Equity instruments issued to nonemployees are recorded at their fair value on the grant date and without subsequent remeasurement. The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest, including awards with graded vesting. As part of the requirements of ASC 718, the Company has elected to account for forfeitures of stock option grants as they occur.

Net Loss Per Common Share

The Company follows the two-class method when computing net income (loss) per common share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per common share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net income (loss) per common share is computed by dividing the net income (loss) per common share by the weighted average number of common shares outstanding for the period. Diluted net income (loss) per common share is computed by adjusting net income (loss) to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net loss per common share is computed by dividing the diluted net loss by the weighted average number of common shares outstanding for the period, including potential dilutive common shares. For purpose of this calculation, outstanding stock options and convertible preferred stock are considered potential dilutive common shares.

The Company's convertible preferred stock contractually entitles the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such securities. In periods in which the Company reported a net loss, diluted net loss per common share is the same as basic net loss per common share, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. The Company reported a net loss for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited).

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the FASB under its ASC or other standard setting bodies.

The Company is an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"). Under the JOBS Act, companies have extended transition periods available for complying with new or revised accounting standards. The Company has elected to use this exemption to delay adopting new or revised accounting standards until such time as those standards apply to private companies. Where allowable, the Company has early adopted certain standards as described below.

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2019-12, "Income Taxes (ASC 740): Simplifying the Accounting for Income Taxes," which simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC 740 and clarifies and amends existing guidance to improve consistent application. The standard will be effective for the Company beginning in the first quarter of fiscal year beginning after December 15, 2021, with early adoption permitted. The amendments that are related to changes in ownership of foreign equity method investments or foreign subsidiaries are to be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. The amendments that are related to franchise

taxes that are partially based on income are to be applied on either a retrospective basis for all periods presented or a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. All other amendments under this ASU are to be applied on a prospective basis. The Company has early adopted the guidance effective January 1, 2020. The adoption of this new standard did not have a material impact on our financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure requirements for fair value measurements. The Company adopted this standard on January 1, 2020. The adoption of ASU 2018-13 had no impact on the Company's financial statements.

In June 2018, the FASB issued ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting (Topic 718), which simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation — Stock Compensation: Improvements to Employee Share-Based Payment Accounting, (Topic 718). The new guidance simplifies certain aspects related to income taxes, statements of cash flows, and forfeitures when accounting for share-based payment transactions. Certain of the amendments related to timing of the recognition of tax benefits and tax withholding requirements should be applied using a modified retrospective transition method. Amendments related to the presentation of the statements of cash flows should be applied retrospectively. All other provisions may be applied on a prospective or modified retrospective basis. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606) which amended the existing FASB Accounting Standards Codification. ASU 2014-09 supersedes the revenue recognition requirements in Revenue Recognition (Topic 605) and establishes a principle for recognizing revenue upon the transfer of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. The standard also provides guidance on the recognition of costs related to obtaining and fulfilling customer contracts. Additionally, the standard requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

ASU 2014-09, as amended, is effective for fiscal 2019, including interim periods within that reporting period. The standard allows for two different methods of adoption. The full retrospective method allows the amendment to be applied retrospectively to each prior period presented, and the modified retrospective method allows the amendment to be applied with the cumulative effect recognized as of the date of initial application. The Company early adopted this standard on January 1, 2018 and the adoption had no impact on the Company's financial position, results of operations or cash flows as the Company does not currently have any revenue-generating arrangements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less may be accounted for similar to existing guidance for operating leases today. For non-public entities, ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2021, including interim periods within those fiscal years, and early adoption is permitted. The Company is in the process

of completing its review of its existing lease agreements under Topic 842 and does not expect the adoption of ASU 2016-02 to have a material impact on its financial position, results of operations or cash flows.

In August 2020, the FASB issued ASU 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40). The new standard reduces the number of accounting models for convertible debt instruments and convertible preferred stock. Limiting the accounting models results in fewer embedded conversion features being separately recognized from the host contract as compared with current GAAP. Convertible instruments that continue to be subject to separation models are (1) those with embedded conversion features that are not clearly and closely related to the host contract, that meet the definition of a derivative, and that do not qualify for a scope exception from derivative accounting and (2) convertible debt instruments issued with substantial premiums for which the premiums are recorded as paid-in capital. The standard also amends the guidance for the derivatives scope exception for contracts in an entity's own equity. For non-public entities, ASU 2020-06 is effective for annual reporting periods beginning after December 15, 2023, including interim periods within those fiscal years, and early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. The Company is in the process of completing its review of its existing convertible instruments under Topic 470 and 815 and does not expect the adoption of ASU 2020-06 to have a material impact on its financial position, results of operations, or cash flows.

3. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

| | December 31, | | September 30, |
|------------------------------|--------------|-------|---------------|
| | 2018 | 2019 | 2020 |
| | | | (unaudited) |
| Prepaid clinical trial costs | \$ — | \$ — | \$ 935 |
| Other | 93 | 35 | 328 |
| | \$ 93 | \$ 35 | \$ 1,263 |

4. Property and Equipment, net

Property and equipment, net consisted of the following (in thousands):

| | December 31, | | September 30, |
|--------------------------------|--------------|-------|---------------|
| | 2018 | 2019 | 2020 |
| | | | (unaudited) |
| Lab equipment | \$ 80 | \$ 89 | \$ 88 |
| Computer equipment | 17 | 17 | 23 |
| Property and equipment, gross | 97 | 106 | 111 |
| Less: Accumulated depreciation | (71) | (80) | (87) |
| Property and equipment, net | \$ 26 | \$ 26 | \$ 24 |

The Company recognized depreciation expense related to these assets of \$8,244 and \$9,033 during the years ended December 31, 2018 and 2019, respectively, and \$6,615 and \$7,080 during the nine months ended September 30, 2019 and 2020 (unaudited), respectively.

5. Other Current Liabilities

Other current liabilities consisted of the following (in thousands):

| | December 31, | | September 30, |
|------------------------------------|--------------|--------|---------------|
| | 2018 | 2019 | 2020 |
| | | | (unaudited) |
| Accrued professional fees | \$ — | \$ — | \$ 2,919 |
| Accrued employee bonuses | — | — | 495 |
| Accrued R&D related costs | — | — | 915 |
| Early exercise of unvested options | — | — | 608 |
| Other | 85 | 443 | 239 |
| | \$ 85 | \$ 443 | \$ 5,176 |

6. Convertible Notes

2017 Convertible Notes

In 2017, the Company issued convertible promissory notes (the "2017 Notes") in the aggregate principal amount of approximately \$0.7 million. The 2017 Notes bore interest at a rate of 6.0% per annum, were unsecured, and were due and payable, including accrued interest, on the first to occur of December 31, 2017 and receipt by the Company of an aggregate amount of cash from any sources equal to or greater than \$2.0 million. In the event of a qualified sale of equity securities resulting in gross proceeds to the Company of at least \$2.0 million (including conversion of the 2017 Notes), the noteholders had an option to convert the 2017 Notes for a number of shares of the Company's convertible preferred stock issued in such a financing equal to the outstanding balance plus accrued interest divided by the price paid by investors in the financing plus a number of shares of common stock equal to 25% of the number of shares of convertible preferred stock issuable as a result of the qualified sale. In the event of a change of control, the 2017 Notes contained a put option whereby the Company was required to pay the holder of the 2017 Notes an amount equal to 150% of the balance immediately prior to such change of control unless the holders of the 2017 Notes elected to convert such notes into a number of shares equal to the balance divided by a conversion price equal to \$5.0 million divided by the number of shares of common stock outstanding immediately prior to the closing of the change of control. In addition, in the event a qualified sale of preferred stock had not occurred and the 2017 Notes had not been converted, the 2017 Notes could have been converted at a price equal to \$5.0 million divided by the number of shares of common stock outstanding immediately prior to the conversion upon maturity, at the noteholder's option. On December 31, 2017, the 2017 Notes became immediately due and payable. However, the Notes were not settled and continued to accrue interest until their extinguishment on July 19, 2018. The Company recorded total interest expense related to the 2017 Notes of \$48,838 through the date of extinguishment.

On July 19, 2018, the Company issued Series A-1 convertible preferred stock. In connection with this offering, holders of the 2017 Notes and the Company agreed to extinguish the unpaid principal and accrued interest due on the 2017 Notes for 953,318 shares of A-1 convertible preferred stock and 238,402 shares of common stock. The Company recorded an extinguishment loss of \$0.1 million related to the 2017 Notes, reflecting the difference between the fair value of the A-1 convertible preferred stock and common stock received and the carrying amounts of the 2017 Notes including accrued interest.

2018 Convertible Notes

In 2018, the Company issued convertible promissory notes (the "2018 Notes") in the aggregate of approximately \$0.4 million. The 2018 Notes bore interest at a rate of 6.0% per annum, were unsecured, and were due and payable, including accrued interest, on June 30, 2019. In the event of a qualified sale of equity securities resulting in gross proceeds to the Company of at least \$3.0 million (including conversion of the 2017 Notes and the

2018 Notes), all principal and accrued and unpaid interest under the 2018 Notes would be automatically converted into a number of shares of the company's convertible preferred stock equal to the balance divided by the price per share paid by investors in the financing plus the number of shares of common stock equal to 25% of the number of shares of convertible preferred stock issued as a result of the qualified sale. In the event of a change of control, the 2018 Notes contained a put option whereby the Company was required to pay the holders of the 2018 Notes an amount equal to 150% of the balance immediately prior to such change of control or the amount the holder would have received if immediately prior to the change of control, the balance had converted into common stock at a conversion price equal to \$5.0 million divided by the number of shares of common stock outstanding immediately prior to the change of control. In addition, in the event of a qualified sale of preferred stock had not occurred and the 2018 Notes had remained outstanding, the 2018 Notes would have automatically been converted into common stock at a price equal to \$5.0 million divided by the number of shares of common stock outstanding immediately prior to the conversion upon maturity. The Company elected the fair value option for the 2018 Notes. Subsequent changes in fair value, including the impact of any coupon interest payable, being recognized through the statements of operations and comprehensive loss as other income (expense) until the 2018 Notes are settled. The fair value of the 2018 Notes liability included all payable amounts; therefore a separate payable was not recorded for accrued interest. All issuance costs associated with the 2018 Notes were expensed at the issuance date.

On July 19, 2018, the Company completed a qualified financing, and issued to holders of the 2018 Notes 485,995 shares of Series A-1 convertible preferred stock, and 121,535 shares of common stock (see Note 5, "Convertible Preferred Stock" and Note 6 "Common Stock"). Immediately prior to settlement, the 2018 Notes were remeasured to their final fair value, which equaled the fair value of the equity consideration to be received upon settlement (i.e., the shares of convertible preferred stock, and common stock). The Company recorded a loss on remeasurement of \$31,483 and \$6,090 of interest expense with respect to the 2018 Notes during the year ended December 31, 2018.

In connection with the issuance of the 2018 Notes, the Company paid an immaterial amount of legal costs, which were expensed.

2020 Convertible Notes

On January 3, 2020 ("issuance date"), the Company issued convertible promissory notes (the "2020 Notes") in the aggregate principal amount of \$3.0 million. The 2020 Notes bore interest at a rate of 1.21% per annum, were unsecured and were due and payable, including accrued interest, on May 2, 2020 ("maturity date"). The Company was not permitted to prepay the outstanding principal and interest without the consent of the note holders. In the event of a default, all unpaid principal and accrued interest would become immediately due.

In the event of a qualified sale of preferred stock prior to the maturity date ("qualified financing") with gross proceeds to the Company of at least \$13.0 million (inclusive of the conversion of the 2020 notes), the outstanding principal and interest outstanding under the 2020 Notes would automatically convert into preferred stock at a conversion price equal to the price paid per share by the investors in the qualified financing.

In the event of a non-qualified sale of preferred stock prior to the maturity date, note holders would have had the option to convert the outstanding principal and interest under the 2020 Notes into the securities sold as part of the non-qualified financing at a conversion price equal to the price paid per share by the investors in the non-qualified financing.

If within five business days prior to the maturity date, the Company had not consummated a qualified financing, holders would have had the option to convert the outstanding principal and interest into Series A-1 preferred stock at a conversion price equal to the original price paid per share for the Series A-1 financing (\$0.7327).

In the event the Company was sold prior to repayment or conversion of the 2020 notes, the note holders would have had the option (i) for the Company to pay an amount equal to two times the aggregate outstanding balance of principal and with interest accruing at a rate of 8% per annum, or (ii) to convert the aggregate outstanding

principal and accrued interest into Series A-1 Preferred Stock at a price equal to the lowest price at which the Company has sold shares of Series A-1 Preferred Stock (\$0.7327).

On the issuance date the Company determined that the conversion option associated with the 2020 Notes met the definition of a beneficial conversion feature ("BCF") as the fair value of the underlying instrument at the time of issuance exceeded the contractual conversion price. The BCF was recognized at its aggregate intrinsic value of \$1.1 million as a debt discount with a corresponding credit to additional paid-in capital in the Company's balance sheet. The debt discount was amortized over the term of the 2020 Notes through the recognition of interest expense via the effective interest method.

On March 17, 2020 (the "settlement date"), the Company issued and sold 7,096,238 shares of Series B convertible preferred stock at \$1.69 per share for gross proceeds of approximately \$12.0 million (see Note 7, "Convertible Preferred Stock"). On the settlement date, the principal and accrued interest then outstanding under the 2020 Notes of \$3.0 million were converted into 1,779,502 shares of Series B convertible preferred stock ("March 2020 conversion").

On the settlement date, the unamortized debt discount on the 2020 Notes was \$0.4 million and the intrinsic value of the BCF was \$2.6 million representing an increase of \$1.5 million from the issuance date of the 2020 Notes. The March 2020 conversion was accounted for as a debt extinguishment. However, as the note holders were previous investors of the Company, the increase in the intrinsic value of the BCF was deemed to be a capital contribution and therefore not income attributable to common stockholders, and accordingly, the Company recorded the \$1.5 million gain on extinguishment of the debt within additional paid-in capital.

7. Convertible Preferred Stock

As of December 31, 2018 and 2019, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue 4,640,126 shares of Series A convertible preferred stock at par value of \$0.0001 per share. On June 30, 2014, the Company issued 4,640,126 shares of Series A convertible preferred stock at \$0.7278 per share for consideration of \$3.4 million. In September 2020, the Company purchased and retired 506,037 shares of Series A convertible preferred stock from investors at a price of \$3.96782 per share, or approximately \$2.0 million.

On July 19, 2018, and as amended on August 1, 2018, the Company authorized the sale and issuance of up to 8,263,388 shares of Series A-1 convertible preferred stock at par value of \$0.0001. On July 19, 2018, the Company issued 6,824,075 shares of Series A-1 convertible preferred stock at \$0.7327 per share for gross proceeds of \$5.0 million, and issued 1,439,313 shares of Series A-1 convertible preferred stock with a fair value of \$1.1 million in connection with the conversion of the 2017 Notes and 2018 Notes (see Note 6, "Convertible Notes"). In September 2020, the Company purchased and retired 70,589 shares of Series A-1 convertible preferred stock at a price of \$3.96782 per share or approximately \$0.3 million.

Series B Convertible Preferred Stock

On March 13, 2020, the Company filed its fourth amended and restated certificate of incorporation, which authorized the Company to sell and issue up to 26,627,219 shares of Series B convertible preferred stock with a par value of \$0.0001 per share. On March 17, 2020, the Company issued and sold 7,096,238 shares of Series B convertible preferred stock at \$1.69 per share for gross proceeds of approximately \$12.0 million. At the same time, the Company issued an additional 1,779,502 shares of Series B convertible preferred stock in conjunction with its conversion of the 2020 Notes (see Note 6, "Convertible Notes," "2020 Convertible Notes"), for a total of 8,875,740 shares of Series B convertible preferred stock issued on March 17, 2020. On March 20, 2020, the Company issued and sold 8,875,740 shares of Series B convertible preferred stock at \$1.69 per share for gross proceeds of approximately \$15.0 million. On May 28, 2020, the Company filed an amendment to its fourth amended and restated certificate of incorporation, which authorized the Company to sell and issue up to 32,781,066 shares of Series B convertible preferred stock. On June 1, 2020, the Company issued and sold 14,142,012 shares of Series B convertible preferred stock at \$1.69 per share for gross proceeds of

approximately \$23.9 million (collectively, "Series B convertible preferred stock issuances"). In total, 31,893,492 shares of Series B convertible preferred stock were issued for gross cash proceeds of approximately \$50.9 million.

The Company incurred issuance costs in connection with the sale and issuance of the Series B convertible preferred stock of \$0.3 million.

On September 3, 2020, the Company filed a second amendment to its fourth amended and restated certificate of incorporation. The amendment had the impact of reducing the authorized number of shares of Series B convertible preferred stock to 31,893,492, the number of shares then outstanding.

Series C Convertible Preferred Stock (unaudited)

On September 29, 2020, the Company filed its fifth amended and restated certificate of incorporation, which authorized the sale of 22,100,000 shares of Series C convertible preferred stock. On September 30, 2020, the Company issued and sold 22,036,764 shares of Series C convertible preferred stock at \$3.96782 per share for gross proceeds of approximately \$87.4 million. The Company incurred issuance costs in connection with the sale and issuance of the Series C convertible preferred stock of \$1.6 million.

The Series A convertible preferred stock, Series A-1 convertible preferred stock, Series B convertible preferred stock and Series C convertible preferred stock are collectively referred to as "convertible preferred stock." As of each balance sheet date, convertible preferred stock consisted of the following (in thousands, except share amounts):

| | As of December 31, 2018 and 2019 | | | | |
|--|--|--|----------------|------------------------|---------------------------------------|
| | Convertible preferred stock Authorized | Convertible preferred stock Issued and Outstanding | Carrying Value | Liquidation Preference | Common Stock Issuable Upon Conversion |
| Series A convertible preferred stock | 4,640,126 | 4,640,126 | \$ 3,377 | \$ 3,377 | 4,640,126 |
| Series A-1 convertible preferred stock | 8,263,388 | 8,263,388 | 5,971 | 6,055 | 8,263,388 |
| | 12,903,514 | 12,903,514 | \$ 9,348 | \$ 9,432 | 12,903,514 |

| | As of September 30, 2020 (unaudited) | | | | |
|--|--|--|----------------|------------------------|---------------------------------------|
| | Convertible Preferred Stock Authorized | Convertible Preferred Stock Issued and Outstanding | Carrying Value | Liquidation Preference | Common Stock Issuable Upon Conversion |
| Series A convertible preferred stock | 4,640,126 | 4,134,089 | \$ 3,009 | \$ 3,009 | 4,134,089 |
| Series A-1 convertible preferred stock | 8,263,388 | 8,192,799 | 5,919 | 6,003 | 8,192,799 |
| Series B convertible preferred stock | 31,893,492 | 31,893,492 | 53,644 | 53,900 | 31,893,492 |
| Series C convertible preferred stock | 22,100,000 | 22,036,764 | 85,801 | 87,438 | 22,036,764 |
| | 66,897,006 | 66,257,144 | \$148,373 | \$ 150,350 | 66,257,144 |

The rights and privileges of the holders of the convertible preferred stock are as follows:

Conversion

Each share of convertible preferred stock is convertible on a one-to-one basis, subject to appropriate adjustment in the event of any stock split, stock dividend, combination or other similar recapitalization at the option of the stockholder and subject to adjustments in accordance with anti-dilution provisions. In addition, the convertible preferred stock automatically converts into shares of common stock at the closing of (i) a qualified IPO pursuant to

an effective registration statement filed under the Securities Act of 1933 that results in aggregate cash proceeds to the Company of not less than \$50.0 million at a valuation per share equal to at least three times the Series A-1 convertible preferred stock original issue price of \$0.7327 per share or (ii) the date specified by vote or written consent of the holders of a majority of the outstanding shares of convertible preferred stock, voting together as a single class on an as converted basis. The number of common stock shares to be issued upon conversion is determined by dividing the original issue price for the relevant series of convertible preferred stock by the conversion price for such series. The conversion price for the convertible preferred stock is initially the original issue price of the convertible preferred stock, or \$0.7278 per share for Series A convertible preferred stock, \$0.7327 per share of Series A-1 convertible preferred stock, \$1.69 per share of Series B convertible preferred stock and \$3.96782 per share of Series C convertible preferred stock, each subject to adjustment.

Liquidation Preference

In the event of any liquidation, dissolution, or winding up of the Company, either voluntarily or involuntarily, the holders of outstanding convertible preferred stock shall be entitled to receive, on a pari passu basis, prior and in preference to any distribution of any of the assets of this Company to the holders of Common Stock, an amount per share equal to the Series A convertible preferred stock original issue price of \$0.7278 per share, the Series A-1 convertible preferred stock original issue price of \$0.7327 per share, the Series B convertible preferred stock original issue price of \$1.69 per share and the Series C convertible preferred stock original issue price of \$3.96782 per share, respectively, plus any dividends declared but unpaid (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to the convertible preferred stock). If, upon the occurrence of such event, the assets distributed among the holders of convertible preferred stock shall be insufficient then the entire assets of the Company legally available for distribution shall be distributed ratably among the holders of the convertible preferred stock in proportion to the respective amounts which would otherwise be payable if all amounts payable related to the shares were paid in full.

Dividends

All dividends are declared pro rata on the common stock and the convertible preferred stock on a pari passu basis according to the number of shares of common stock held by such owners. For this purpose each convertible preferred stock stockholder is treated as holding the greatest whole number of shares of common stock then issuable upon conversion of all shares of held convertible preferred stock. Through December 31, 2019 and September 30, 2020 (unaudited), no cash dividends have been declared or paid by the Company.

Voting Rights

The holders of convertible preferred stock are entitled to a number of votes equal to the number of whole shares of common stock into which each share of convertible preferred stock is convertible as of the record date for determining stockholders entitled to vote on such matter. With respect to such vote, such holder the same voting rights of the holders of common stock. Except as required by law or by the provisions of the Company's amended and restated certificate of incorporation, holders of convertible preferred stock and common stock vote together as one class on an as-converted basis.

Holders of shares of Series B convertible preferred stock, voting as a separate class on an as converted basis, are entitled to elect two directors of the Company. The holders of shares of Series C convertible preferred stock, voting as a separate class on an as converted basis, are entitled to elect one director of the Company. Holders of common stock, voting together as a separate class, are entitled to elect two directors of the company. The holders of the outstanding shares of common stock and convertible preferred stock, voting as a single class on an as-converted basis, are entitled to elect the remaining authorized directors.

Redemption

The holders of convertible preferred stock have certain liquidation rights in the event of a deemed liquidation that, in certain situations, is not solely within the control of the Company and would call for the redemption of the

then outstanding convertible preferred stock. Therefore, the convertible preferred stock are classified outside of shareholders' deficit on the balance sheets. The carrying value of the convertible preferred stock is not subsequently remeasured to the redemption value until the contingent redemption events are considered to be probable of occurring.

8. Common Stock

As of December 31, 2018 and 2019, the Company's amended and restated certificate of incorporation, authorized the Company to issue 22,000,000 shares of common stock with a par value of \$0.0001 per share. On March 13, 2020, the Company filed its fourth amended and restated certificate of incorporation which authorized the Company to issue 53,500,000 shares of common stock with a par value of \$0.0001. On May 28, 2020, the Company filed a certificate of amendment to increase the number of authorized shares of common stock to 59,653,847 at a par value of \$0.0001. On September 3, 2020, the Company filed a second amendment to its fourth amended and restated certificate of incorporation, increasing the number of authorized shares to 65,000,000 shares of common stock with a par value of \$0.0001. On September 29, 2020, the Company filed a fifth amended and restated certificate of incorporation which authorized the Company to issue 88,000,000 shares of common stock with a par value of \$0.0001 per share.

The voting, dividend and liquidation rights of the holders of the Company's common shares are subject to and qualified by the rights, powers and preferences of the holders of the convertible preferred stock set forth above.

On July 19, 2018, as a result of the conversion of the Notes, the Company issued 359,937 shares of common stock (see Note 6, "Convertible Notes").

As of December 31, 2018 and 2019, there were 22,000,000 shares of common stock authorized, 7,820,200 shares issued and 7,230,200 shares outstanding. As of September 30, 2020 (unaudited), there were 88,000,000 shares of common stock authorized, 10,468,047 shares of common stock issued and 7,971,695 shares of common stock outstanding.

As of each balance sheet date, the Company had reserved shares of common stock for issuance in connection with the following:

| | December 31, September 30, | | |
|--|----------------------------|-------------------|-------------------|
| | 2018 | 2019 | 2020 |
| | | | (unaudited) |
| Conversion of outstanding shares of convertible preferred stock | 12,903,514 | 12,903,514 | 66,257,144 |
| Options outstanding under the 2014 Stock Plan ⁽¹⁾⁽²⁾ | 310,000 | 310,000 | 7,357,579 |
| Shares available for future grant under the 2014 Stock Plan | 1,100,000 | 1,100,000 | 3,275,926 |
| Unvested restricted stock awards outstanding under the 2014 Stock Plan | — | — | 2,125,000 |
| | <u>14,313,514</u> | <u>14,313,514</u> | <u>79,015,649</u> |

(1) Balance as of December 31, 2018 and 2019 excludes 590,000 shares that were exercised under the non-recourse receivable (see Notes Receivable below).

(2) Balance as of September 30, 2020 (unaudited) excludes 371,352 unvested early exercised stock options (see Note 9, "Stock-Based Compensation").

Each common share entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. The holders of shares of common stock, voting as a separate class, are entitled to elect two directors. Common stockholders are entitled to receive dividends, if any, as may be declared by the Company's Board of Directors, subject to the preferential dividend rights of the convertible preferred stock. Through December 31, 2019 and September 30, 2020 (unaudited), no cash dividends had been declared or paid by the Company.

Notes Receivable

In December 2015, the Company entered into two non-recourse notes receivable agreements with certain employees of the Company for \$0.1 million and \$14,000 (the "Non-Recourse Notes"), respectively, related to the exercise of stock options. The Non-Recourse Notes cover the exercise of 490,000 and 100,000 shares of common stock, accrue simple interest at an annual rate of 1.48%, and mature on February 28, 2025. The Non-Recourse Notes are collateralized by the shares of the Company's common stock issued. Since the Non-Recourse Notes are considered in-substance nonrecourse, the Company has not considered this to be a substantive exercise for accounting purposes and has not recorded the shares outstanding or the Non-Recourse Notes as an asset on the accompanying balance sheets as of December 31, 2018 and 2019. See Note 9, "Stock-Based Compensation" and Note 13, "Related Parties." During September 2020, all outstanding principal and accrued interest relating to the Non-Recourse Notes were settled in full by the two noteholders. As a result, the Company issued 590,000 shares of common stock to the noteholders.

9. Stock-Based Compensation

In 2014, the Company's Board of Directors and stockholders approved and adopted the 2014 Stock Plan (the "Plan"). The Plan is intended to advance the interests of the Company and its stockholders by providing an incentive to attract, retain and reward persons performing services for the Company and by motivating such persons to contribute to the growth and profitability of the Company. The Plan permits the grant of options and restricted stock awards (including restricted stock purchase rights and restricted stock bonus awards). The maximum aggregate number of shares that may be subject to awards and sold under the Plan as of December 31, 2018 and 2019 was 2,000,000 shares. In March 2020, the Company's Board of Directors and stockholders increased the number of shares under the Plan to 6,500,000 shares. In September 2020, the Company's Board of Directors and stockholders approved additional increases under the Plan to allow for 11,500,000 shares and subsequently 13,500,000 shares. The shares may be authorized but unissued, or reacquired common stock. The exercise price for each option shall be established in the discretion of the Board; provided, however, that (i) the exercise price per share for an option shall be no less than the fair market value of a share of common stock on the effective date of the grant of the option and (ii) no incentive stock option granted to a ten percent stockholder shall have an exercise price per share less than 110% of the fair market value of a share of common stock on the effective date of the grant of the option. Specific vesting for stock options is service related and determined in each award agreement, where stock options are fully vested at the grant date or follow a graded vesting schedule. Options granted under the Plan generally expire ten years after the date of grant. During the nine months ended September 30, 2020, the Company granted to certain directors, employees, and consultants options to purchase 7,124,074 shares of common stock at exercise prices ranging from \$0.74 per share to \$1.73 per share.

At December 31, 2018 and 2019, 1,100,000 shares were available for future grants. At September 30, 2020 (unaudited), 3,275,926 shares were available for future grants.

Stock Option Valuation

The assumptions that the Company used to determine the grant-date fair value of stock options granted to employees and directors were as follows, presented as a weighted average:

| | Years Ended December 31, Nine Months Ended September 30, | | | |
|--|--|------|-------------|--------|
| | 2018 | 2019 | 2019 | 2020 |
| | | | (unaudited) | |
| Weighted average risk-free interest rate | * | * | * | 0.39% |
| Expected term (in years) | * | * | * | 5.90 |
| Expected volatility | * | * | * | 77.50% |
| Expected dividend yield | * | * | * | 0% |

* There were no stock options granted during the period.

Stock Option Activity

The following table summarizes the stock option activity under the Plan:

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term (in years) | Aggregate Intrinsic Value (in thousands) |
|--|---------------------|--|---|--|
| Outstanding as of December 31, 2018 ⁽¹⁾ | 900,000 | \$ 0.14 | 7.04 | \$ — |
| Granted | — | — | — | — |
| Exercised | — | — | — | — |
| Forfeited | — | — | — | — |
| Outstanding as of December 31, 2019 ⁽¹⁾ | 900,000 | \$ 0.14 | 6.04 | \$ — |
| Granted | 7,124,074 | 1.54 | — | — |
| Exercised | (666,495) | 0.17 | — | — |
| Forfeited | — | — | — | — |
| Outstanding as of September 30, 2020 (unaudited) ⁽²⁾ | <u>7,357,579</u> | <u>\$ 1.49</u> | 9.75 | \$ 5,564 |
| Options vested and exercisable as of December 31, 2019 | 889,583 | \$ 0.14 | 6.02 | \$ — |
| Options vested and exercisable as of September 30, 2020 (unaudited) | 1,010,017 | \$ 0.95 | 8.71 | \$ 1,314 |
| Options expected to vest as of December 31, 2019 | 10,417 | \$ 0.14 | 7.59 | \$ — |
| Options expected to vest as of September 30, 2020 (unaudited) | 6,347,562 | \$ 1.58 | 9.92 | \$ 4,250 |

(1) Inclusive of 590,000 shares that were exercised under a non-recourse note receivable that were legally issued, but not deemed outstanding for accounting purposes (see Note 13, "Related Parties").

(2) Balance as of September 30, 2020 (unaudited) excludes 371,352 unvested early exercised stock options (see Note 8, "Common Stock" and Note 13, "Related Parties").

The total fair value of options vested during each of the years ended December 31, 2018 and 2019, was \$1,000. The total fair value of options vested during the nine months ended September 30, 2020 (unaudited) was \$0.6 million.

Early Exercise of Stock Options

In September 2020, one employee and one non-employee paid \$0.6 million to early exercise 377,847 options with exercise prices ranging from \$1.58 per share to \$1.73 per share. As of September 30, 2020, 6,495 shares had vested with the remaining shares vesting over their respective terms. The terms of the Plan permit certain option holders to exercise options before their options are vested, subject to certain limitations. The early exercised options are subject to the same vesting provisions in the original stock option awards. Shares issued as a result of early exercise that have not vested are subject to repurchase by the Company upon termination of the purchaser's employment, at the price paid by the purchaser. Such shares are not deemed to be outstanding for accounting purposes until they vest and are therefore excluded from shares outstanding and from basic and diluted net loss per share until the repurchase right lapses and the shares are no longer subject to the repurchase feature. A liability is recognized related to the cash proceeds of the unvested options and is reclassified into common stock and additional paid-in capital as the shares vest and the repurchase right lapses. Accordingly, the Company has recorded the unvested portion of the exercise proceeds of \$0.6 million in other current liabilities as of September 30, 2020 (unaudited).

Restricted Stock Awards

In June 2020, the Company granted to certain employees 2,200,000 shares of restricted common stock under the Plan as consideration for services with a deemed value of \$0.86 per share, or \$1.9 million. The following table summarizes the restricted stock activity under the Plan during the nine months ended September 30, 2020 (unaudited):

| | Number of Shares | Grant Date Fair Value |
|--|------------------|-----------------------|
| Unvested restricted stock as of December 31, 2019 | — | \$ — |
| Granted | 2,200,000 | 0.86 |
| Vested | (75,000) | 0.86 |
| Forfeited | — | — |
| Unvested restricted stock as of September 30, 2020 (unaudited) | 2,125,000 | \$ 0.86 |

Stock-Based Compensation Expense

The fair value of stock option grants is estimated using the Black-Scholes option-pricing model. The Company lacks company-specific historical and implied volatility information. Therefore, it estimated its expected stock volatility based on the historical volatility of a publicly traded set of peer companies. For options with service-based vesting conditions, the expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to nonemployees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

Stock-based compensation expense was classified in the statements of operations and comprehensive loss as follows (in thousands):

| | Years Ended December 31, Nine Months Ended September 30, | | | |
|-----------------------------------|--|------|------|-------------|
| | 2018 | 2019 | 2019 | 2020 |
| | | | | (unaudited) |
| Research and development expenses | \$ 1 | \$ — | \$ — | \$ 495 |
| General and administrative | — | — | — | 241 |
| | \$ 1 | \$ — | \$ — | \$ 736 |

10. Income Taxes

The reconciliation of the Federal statutory income tax provision to the Company's effective income tax provision is as follows (in thousands):

| | Years Ended December 31, | |
|--|-----------------------------|---------|
| | 2018 | 2019 |
| Federal statutory income tax | \$ 461 | \$ 906 |
| State income taxes, net of federal tax benefit | 144 | 300 |
| Other permanent items | (28) | (3) |
| Valuation allowance | (577) | (1,203) |
| Provision for income taxes | \$ — | \$ — |

The Company did not record a federal or state income tax provision or benefit for the three months or nine months ended September 30, 2019 and 2020 (unaudited) due to the expected loss before income taxes to be incurred

for the years ended December 31, 2019 and 2020, as well as the Company's continued maintenance of a full valuation allowance against its net deferred tax assets.

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 Company's deferred income tax assets and liabilities at December 31, 2018 and 2019 were comprised of the following (in thousands):

| | As of December 31, | |
|----------------------------------|--------------------|-----------------|
| | 2018 | 2019 |
| Deferred tax assets: | | |
| Net operating loss carryforwards | \$ 1,504 | \$ 2,706 |
| Equity compensation | 6 | 6 |
| Total deferred tax assets | <u>\$ 1,510</u> | <u>\$ 2,712</u> |
| Deferred tax liabilities: | | |
| Fixed assets | \$ (5) | \$ (4) |
| Total deferred tax liabilities | <u>\$ (5)</u> | <u>\$ (4)</u> |
| Valuation allowance | \$(1,505) | \$(2,708) |
| Net deferred tax assets | <u>\$ —</u> | <u>\$ —</u> |

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Based on the level of historical operating results and the uncertainty of the economic conditions, the Company has recorded a valuation allowance of \$1.5 million and \$2.7 million at December 31, 2018 and 2019, respectively. The change in the valuation allowance for the year end December 31, 2019 was an increase of \$1.2 million.

At December 31, 2018 and 2019, the Company had Federal net operating losses (NOLs) of approximately \$5.4 million and \$9.7 million, and state NOLs of \$5.4 million and \$9.7 million, respectively. As a result of the Tax Act, for U.S. income tax purposes, NOLs generated in tax years beginning before January 1, 2018 can still be carried forward for up to 20 years, but net operating losses generated for tax years beginning after December 31, 2017 carryforward indefinitely and can be used to offset taxable income. Of the total Federal net operating loss of \$9.7 million, \$3.3 million will begin to expire in 2032 and \$6.3 million will not expire. The state NOL carryover of \$9.7 million will begin to expire in 2032.

Pursuant of Internal Revenue Code (IRC) Sections 382 and 383, annual use of the Company's net operating loss and research and development credit carryforwards may be limited in the event a cumulative change in ownership of more than 50% occurs within a three-year period. The Company has not completed an ownership change analysis pursuant to IRC Section 382. If ownership changes within the meaning of IRC Section 382 are identified as having occurred, the amount of remaining tax attribute carryforwards available to offset future taxable income and income tax expense in future years may be significantly restricted or eliminated. Further, the Company's deferred tax assets associated with such tax attributes could be significantly reduced upon realization of an ownership change within the meaning of IRC Section 382 that has occurred or may occur in the future. Any adjustment to the Company's tax attributes as a result of an ownership change will result in a corresponding decrease to the valuation allowance recorded against the Company's deferred tax assets.

The Company's valuation allowance increased during the years ended December 31, 2019 and 2018 due primarily to the generation of net operating losses, as follows (in thousands):

| | Years Ended December 31, | |
|---|-----------------------------|---------|
| | 2018 | 2019 |
| Valuation allowance at beginning of year | \$ 928 | \$1,505 |
| Increase recorded to provision for income taxes | 577 | 1,203 |
| Valuation allowance at end of year | \$1,505 | \$2,708 |

The Company has not incurred any material interest or penalties as of the current reporting date with respect to income tax matters. The Company does not expect that there will be unrecognized tax benefits of a significant nature that will increase or decrease within 12 months of the reporting date. The Company is subject to U.S. Federal income tax as well as income tax in California. The Federal returns for tax years 2017 through 2019 remain open to examination; the state returns remain subject to examination for tax years 2016 through 2019. Carryforward attributes that were generated in years where the statute of limitations is closed may still be adjusted upon examination by the Internal Revenue Service or other respective tax authority.

The Company's policy is to recognize interest expense and penalties related to income tax matters as tax expense. At December 31, 2019, there are no significant accruals for interest related to unrecognized tax benefits or tax penalties.

The unrecognized tax benefit amounts are not reflected in the determination of the Company's deferred tax assets. If recognized, none of these amounts would affect the Company's effective tax rate, since it would be offset by an equal corresponding adjustment in the deferred tax asset valuation allowance. The Company does not foresee material changes to its liability for uncertain tax benefits within the next twelve months.

11. Net Loss Per Common Share and Unaudited Pro Forma Net Loss Per Common Share

Net Loss Per Common Share

Basic and diluted net loss per common share was calculated as follows (in thousands, except share and per share amounts):

| | Years Ended December 31, | | Nine Months Ended September 30, | |
|---|-----------------------------|------------|------------------------------------|-------------|
| | 2018 | 2019 | 2019 | 2020 |
| | (unaudited) | | | |
| Numerator: | | | | |
| Net loss | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (11,990) |
| Repurchase and retirement of Series A and Series A-1 convertible preferred stock | — | — | — | (1,869) |
| Net loss attributable to common stockholders | \$ (2,197) | \$ (4,316) | \$ (3,299) | \$ (13,859) |
| Denominator: | | | | |
| Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted | 7,032,974 | 7,230,200 | 7,230,200 | 7,297,745 |
| Net loss per share attributable to common stockholders, basic and diluted | \$ (0.31) | \$ (0.60) | \$ (0.46) | \$ (1.90) |

The Company's potentially dilutive securities, which include unvested restricted common stock, stock options and convertible preferred stock, have been excluded from the computation of diluted net loss per common share as

the effect would be to reduce the net loss per common share. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per common share is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per common share for the periods indicated because including them would have had an anti-dilutive effect:

| | Years Ended December 31, | | Nine Months Ended September 30, | |
|---|-----------------------------|-------------------|------------------------------------|-------------------|
| | 2018 | 2019 | 2019 | 2020 |
| | | | (unaudited) | |
| Unvested restricted common stock | — | — | — | 2,125,000 |
| Options to purchase common stock | 900,000 | 900,000 | 900,000 | 7,357,579 |
| Convertible preferred stock (as converted to common shares) | 12,903,514 | 12,903,514 | 12,903,514 | 66,257,144 |
| | <u>13,803,514</u> | <u>13,803,514</u> | <u>13,803,514</u> | <u>75,739,723</u> |

Included in the potentially dilutive options to purchase common stock noted above are 590,000 shares issued upon exercise of options under non-recourse notes receivable during 2015 (see Note 6, "Common Stock," Note 9, "Stock-Based Compensation" and Note 11, "Related Parties"). The Company determined the purchase of the stock to be non-substantive, and as such, the shares subject to the promissory notes will not be deemed outstanding until such time as the promissory notes have been repaid. Accordingly, the Company has excluded these shares from the calculation of basic and diluted net loss per share for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 (unaudited). During September 2020, all outstanding principal and accrued interest relating to the Non-Recourse Notes were settled in full by the two noteholders, and as a result, the Company issued 590,000 shares of common stock to the noteholders. Also included in the potentially dilutive options to purchase common stock are 371,352 unvested stock options that were early exercised by an employee and a non-employee in September 2020 (unaudited) (see Note 9, "Stock-Based Compensation"). The Company determined the early exercises to be non-substantive as the shares were subject to repurchase rights. Accordingly, the Company has excluded these shares from the calculation of basic and diluted net loss per share for the nine months ended September 30, 2020 (unaudited).

Unaudited Pro Forma Net Loss Per Common Share

The weighted average shares used to compute unaudited pro forma net loss per common share, basic and diluted, for the year ended December 31, 2019 and September 30, 2020 have been prepared to give effect, upon a completion of an IPO, to the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed IPO had occurred on January 1, 2019.

Unaudited pro forma net loss per common share, basic and diluted, was calculated as follows (in thousands, except share and per share amounts):

| | Year Ended December 31, 2019 | Nine Months Ended September 30, 2020 (unaudited) |
|--|---------------------------------|--|
| Numerator: | | |
| Net loss attributable to common stockholders | \$ (4,316) | \$ (13,859) |
| Denominator: | | |
| Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted | 7,230,200 | 7,297,745 |
| Weighted average pro forma adjustment to reflect assumed conversion of convertible preferred stock into common stock upon the closing of a qualified IPO | 12,903,514 | 32,009,176 |
| Weighted average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) | 20,133,714 | 39,306,921 |
| Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) | \$ (0.21) | \$ (0.35) |

12. Commitments and Contingencies

Management Services Agreement

On June 1, 2013, the Company entered into a management services agreement with MandalMed, Inc. ("MandalMed")(the "MandalMed Services Agreement"). As per the terms of the MandalMed Services Agreement, the Company is permitted to rent approximately 5,762 square feet of MandalMed's bioscience laboratory, obtain certain administrative and facilities services and use equipment, reagents and supplies from MandalMed. The services agreement commenced on June 1, 2013 and expired September 31, 2013. On June 1, 2013, the Company entered into the first amendment to the MandalMed Services Agreement to add office space, expand the laboratory space and extend the term to September 31, 2013 with the right to extend on a three-month basis. On December 1, 2013, the Company entered into the second amendment to the MandalMed Services Agreement to add office space, lab bench space and extend the term to July 1, 2014 with the right to extend on a six-month basis. On April 15, 2016, the Company entered into the third amendment to the MandalMed Services Agreement to extend the term to June 30, 2016 with six-month extensions. On November 12, 2019, the Company entered into the fourth amendment to the MandalMed Services Agreement to extend the term to June 30, 2018 with six-month extensions. On December 5, 2019, the Company entered into the fifth amendment to the MandalMed Services Agreement to extend the term to June 30, 2020 with automatic six-month extensions unless terminated by either party upon 60 days prior notice. As per the fifth amendment to the MandalMed Services Agreement, the Company is required to maintain a one-time, refundable damage deposit of \$3,600 and pay a \$6,500 monthly fee for the use of laboratory benches, administrative and facilities services, lab equipment and office space. The Company recorded rent expense of \$0.1 million during the years ended December 31, 2018 and 2019, respectively, in connection with the MandalMed Services Agreement. The Company is required to pay future minimum lease payments of \$39,000 in 2020 as of December 31, 2019. As neither party opted out of the agreement, it was automatically extended until December 31, 2020. As of September 30, 2020 (unaudited), the Company is required to make future minimum lease payments of \$19,500 for the remaining three month term ending December 31, 2020.

On August 27, 2020, the Company entered into a lease agreement with 512 2nd Street LLC to lease approximately 3,500 square feet of office space in San Francisco, California (the "Office Space Lease Agreement"). The Office Space Lease Agreement is for a period of two years commencing on September 1, 2020 and ending August 31, 2022. According to the terms of the Office Space Lease Agreement, the Company paid a \$0.1 million security

deposit and is required to pay monthly rent and common area charges. Rent is \$23,330 and \$24,030 for the first and second years of the lease term, respectively.

The following table summarizes the future minimum lease payments due under operating leases as of September 30, 2020 (unaudited) (in thousands):

| Year Ending December 31, | |
|---------------------------------|----------------|
| 2020 (remaining) | \$2,488 |
| 2021 | 283 |
| 2022 | 192 |
| 2023 | — |
| 2024 | — |
| Thereafter | — |
| | \$2,963 |

Clinical Collaboration and Supply Agreement

On July 22, 2020, the Company entered into a non-exclusive clinical collaboration and supply agreement with Novartis Institutes for BioMedical Research, Inc. (“Novartis”) (the “Novartis Agreement”). The collaboration is focused on the evaluation of the safety, tolerability and efficacy of OP-1250 in combination with Novartis’ proprietary CDK4/6 inhibitor Kisqali[®] (ribociclib) and/or Novartis’ proprietary phosphatidylinositol 3-kinase inhibitor Piqray[®] (apelisib) (collectively the “Novartis Study Drugs”) as part of the Company’s planned Phase 1b clinical trial of OP-1250 in patients with metastatic estrogen receptor-positive breast cancer. The Company will be responsible for the conduct of the clinical trials for the combined therapies in accordance with a mutually agreed development plan. As part of the collaboration, the parties granted to each other a non-exclusive, royalty-free license under certain of the parties’ respective background patent rights and other technology to use the parties’ respective study drugs in research and development, solely to the extent reasonably needed for the other party’s activities in the collaboration. All inventions and data developed in the performance of the clinical trials for the combined therapies (other than those specific to each component study drug), will be jointly owned by the parties.

The Company is responsible for manufacturing, packaging and labeling OP-1250, and for packaging and labeling all drugs used in the clinical trials for the combined therapies (other than the Novartis Study Drugs). Novartis is responsible for manufacturing and delivering to the Company the Novartis Study Drugs in such quantities as reasonably needed for the clinical trials for the combined therapies. In accordance with an agreed budget, Novartis will reimburse the Company for a majority of the direct outside costs that the Company incurs related to conducting the activities under the agreed development plan in conducting the clinical trials for the combined therapies.

The Novartis Agreement will terminate upon completion of all activities outlined in the development plan and the relevant protocols. Either party may terminate the Novartis Agreement for the uncured material breach or insolvency of the other party, if it reasonably deems it necessary in order to protect the safety, health or welfare of subjects enrolled in the clinical trials for the combined therapies due to the existence of a material safety issue, or in certain circumstances for an unresolved clinical hold with respect to either the Novartis Study Drugs or OP-1250. In addition, Novartis may terminate the Novartis Agreement if certain disputes between the parties are not resolved after following the applicable dispute resolution procedures, and the Company may terminate the Novartis Agreement in the event the Company terminates all clinical trials of the combined therapies other than due to a material safety issue or upon a clinical hold.

Contingencies

From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of business. The Company accrues a liability for such matters when it is probable that future expenditures will be

made, and such expenditures can be reasonably estimated. For all periods presented, the Company was not a party to any pending material litigation or other material legal proceedings.

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its Board of Directors and executive officers that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. As of December 31, 2018 and 2019, the Company had not incurred any material costs as a result of such indemnifications.

13. Related Parties

In December 2015, the Company entered into notes receivable agreements with certain employees of the Company for \$0.1 million and \$14,000, respectively, related to exercises of stock options. The Non-Recourse Notes cover the exercise of 490,000 and 100,000 shares of common stock, accrue simple interest at an annual rate of 1.48%, and mature on February 28, 2025. The Non-Recourse Notes are collateralized by the shares of the Company's common stock issued. Since the notes are considered in-substance nonrecourse, the Company has not considered this to be a substantive exercise for accounting purposes and has not recorded the shares outstanding or the Non-Recourse Notes as an asset on the accompanying balance sheets. See Note 8, "Common Stock," Note 9, "Stock-Based Compensation" and Note 14, "Subsequent Events."

During September 2020 (unaudited), all outstanding principal and accrued interest relating to the Non-Recourse Notes were settled in full by the two noteholders, and as a result, the Company issued 590,000 shares of common stock to the noteholders.

In September 2020, an employee and a non-employee early exercised 377,847 stock options, 371,352 of which were unvested as of September 30, 2020 (unaudited) (see Note 9, "Stock-Based Compensation").

14. Subsequent Events

For its financial statements as of December 31, 2019 and the year then ended, management has reviewed and evaluated material subsequent events from the balance sheet date of December 31, 2019, through September 18, 2020, which is the date the financial statements were available to be issued.

2020 Convertible Promissory Notes

On January 3, 2020, the Company issued convertible promissory notes (the "2020 Notes") in the aggregate principal amount of \$3.0 million. The 2020 Notes bore interest at a rate of 1.21% per annum, were unsecured and were due and payable, including accrued interest, on May 2, 2020. In the event of a qualified sale of equity securities resulting in gross proceeds to the Company of at least \$13.0 million, all principal and accrued and unpaid interest under the 2020 Notes would automatically convert into a number of shares of the Company's convertible preferred stock issued in such a financing equal to the balance divided by the price paid by investors in the financing.

Series B Convertible Preferred Stock

On March 13, 2020, the Company's filed its fourth amended and restated certificate of incorporation, which authorized the Company to sell and issue up to 26,627,219 shares of Series B convertible preferred stock with a par value of \$0.0001 per share.

On March 17, 2020, the Company issued and sold 7,096,238 shares of Series B convertible preferred stock at \$1.69 per share for gross proceeds of approximately \$12.0 million. This excludes shares issued upon conversion of the 2020 Notes, which are discussed under “Conversion of the 2020 Notes in Connection with the Series B Preferred Stock Financing” below.

On March 20, 2020, the Company issued and sold 8,875,740 shares of Series B convertible preferred stock at \$1.69 per share for approximately \$15.0 million.

On May 28, 2020, the Company filed an amendment to its fourth amended and restated certificate of incorporation, which authorized the Company to sell and issue up to 32,781,066 shares of Series B convertible preferred stock.

On June 1, 2020, the Company issued and sold 14,142,012 shares of Series B convertible preferred stock at \$1.69 per share for approximately \$23.9 million.

The Company incurred issuance costs on the Series B convertible preferred stock issuances on March 17, 2020, March 20, 2020 and June 1, 2020 of \$0.3 million.

Conversion of the 2020 Notes in Connection with the Series B Preferred Stock Financing

The Series B convertible preferred stock financing constituted a qualified financing under the 2020 Notes, triggering an automatic conversion of the unpaid principal and accrued interest into 1,779,502 shares of Series B convertible preferred stock.

Clinical Collaboration and Supply Agreement

On July 22, 2020, the Company entered into a non-exclusive clinical collaboration and supply agreement with Novartis Institutes for BioMedical Research, Inc. (“Novartis”) (the “Novartis Agreement”). The collaboration is focused on the evaluation of the safety, tolerability and efficacy of OP-1250 in combination with Novartis’ proprietary CDK4/6 inhibitor Kisqali® (ribociclib) and/or Novartis’ proprietary phosphatidylinositol 3-kinase inhibitor Piqray® (alpelisib) (collectively the “Novartis Study Drugs”) as part of the Company’s planned Phase 1b clinical trial of OP-1250 in patients with metastatic estrogen receptor-positive breast cancer. The Company will be responsible for the conduct of the clinical trials for the combined therapies in accordance with a mutually agreed development plan. As part of the collaboration, the parties granted to each other a non-exclusive, royalty-free license under certain of the parties’ respective background patent rights and other technology to use the parties’ respective study drugs in research and development, solely to the extent reasonably needed for the other party’s activities in the collaboration. All inventions and data developed in the performance of the clinical trials for the combined therapies (other than those specific to each component study drug), will be jointly owned by the parties.

The Company is responsible for manufacturing, packaging and labeling OP-1250, and for packaging and labeling all drugs used in the clinical trials for the combined therapies (other than the Novartis Study Drugs). Novartis is responsible for manufacturing and delivering to the Company the Novartis Study Drugs in such quantities as reasonably needed for the clinical trials for the combined therapies. In accordance with an agreed budget, Novartis will reimburse the Company for a majority of the direct outside costs that the Company incurs related to conducting the activities under the agreed development plan in conducting the clinical trials for the combined therapies.

The Novartis Agreement will terminate upon completion of all activities outlined in the development plan and the relevant protocols. Either party may terminate the Novartis Agreement for the uncured material breach or insolvency of the other party, if it reasonably deems it necessary in order to protect the safety, health or welfare of subjects enrolled in the clinical trials for the combined therapies due to the existence of a material safety issue, or in certain circumstances for an unresolved clinical hold with respect to either the Novartis Study Drugs or OP-1250. In addition, Novartis may terminate the Novartis Agreement if certain disputes between the parties are not resolved after following the applicable dispute resolution procedures, and the Company may terminate

the Novartis Agreement in the event the Company terminates all clinical trials of the combined therapies other than due to a material safety issue or upon a clinical hold.

Lease Agreement

On August 27, 2020, the Company entered into a lease agreement with 512 2nd Street LLC to lease approximately 3,500 square feet of office space in San Francisco, California (the "Office Space Lease Agreement"). The Office Space Lease Agreement is for a period of two years commencing on September 1, 2020 and ending August 31, 2022. According to the terms of the Office Space Lease Agreement, the Company paid a \$0.1 million security deposit and is required to pay monthly rent of \$23,330 and \$24,030 for the first and second years of the lease term, respectively.

Amendment of Fourth Amended and Restated Certificate of Incorporation

On September 3, 2020, the Company filed a second amendment to its fourth amended and restated certificate of incorporation. Following such amendment, the authorized capital stock of the Company was as follows: 109,797,006 shares, of which 65,000,000 shares are common stock and 44,797,006 shares are convertible preferred stock, 4,640,126 of which are designated Series A convertible preferred stock, 8,263,388 of which are designated Series A-1 convertible preferred stock, and 31,893,492 of which are designated Series B convertible preferred stock.

Amendments to 2014 Stock Plan

In March 2020, the Company's Board of Directors and stockholders approved an increase in the number of shares reserved for issuance under the Plan from 2,000,000 shares to 6,500,000 shares.

In September 2020, the Company's Board of Directors and stockholders approved an increase in the number of shares reserved for issuance under the Plan from 6,500,000 shares to 11,500,000 shares.

Restricted Stock Awards

In June 2020, as described below, the Company granted to certain employees 2,200,000 shares of restricted common stock under the Plan. These non-cash issuances were as consideration for services at an estimated fair value of \$0.86, for aggregate consideration of \$1.9 million.

Executive Officers

In May 2020, the Company entered into an employment agreement with Kinney Horn to serve as the Company's Chief Business Officer, reporting directly to the CEO. Mr. Horn is entitled to an initial base salary, effective May 25, 2020, of \$375,000 per year, and a year-end incentive bonus, beginning in 2020, targeted at 35% of Mr. Horn's base salary, as determined by the Company's Board of Directors. In addition, Mr. Horn was granted an option to purchase an aggregate of 702,744 shares of common stock with an exercise price of \$0.74 per share.

In June 2020, the Company entered into an employment agreement with Shane Kovacs to serve as the Company's Chief Financial Officer and Chief Operating Officer, reporting directly to the CEO. Mr. Kovacs is entitled to an initial base salary, effective June 15, 2020, of \$400,000 per year, and a year-end incentive bonus, beginning in 2020, targeted at 35% of his base salary, as determined by the Company's Board of Directors. In addition, Mr. Kovacs was granted a restricted stock award of 1,000,000 shares of common stock.

In June 2020, the Company entered into an offer letter that governs the current terms of Cyrus L. Harmon, Ph.D.'s employment. Pursuant to the agreement, Dr. Harmon is entitled to an initial annual base salary, effective January 1, 2020, of \$450,000, and is eligible to receive an annual performance bonus with a target achievement of 45% of his base salary, as determined by the Company's Board of Directors. In addition, Mr. Harmon was granted a restricted stock award of 400,000 shares of common stock. In September 2020, in connection with his transition to the role of Chief Technology Officer, Dr. Harmon's annual base salary increased to \$500,000, and he was granted an option to purchase 635,272 shares of common stock with an exercise price of \$1.73 per share.

In June 2020, the Company entered into an offer letter that governs the current terms of Peter Kushner, Ph.D.'s employment. Pursuant to the agreement, Dr. Kushner will continue to serve as the Company's Chief Scientific Officer and is entitled to an initial annual base salary, effective January 1, 2020, of \$400,000, is eligible to receive an annual performance bonus with a target achievement of 30% of his base salary, as determined by the Company's Board of Directors. In addition, Dr. Kushner was granted a restricted stock award of 400,000 shares of common stock.

In June 2020, the Company entered into an offer letter that governs the current terms of David Myles, Ph.D.'s employment. Pursuant to the agreement, Dr. Myles will serve as the Company's Chief Development Officer and is entitled to an initial annual base salary, effective January 1, 2020, of \$340,000, is eligible to receive an annual performance bonus with a target achievement of 30% of his base salary, as determined by the Company's Board of Directors. In addition, Dr. Myles was granted a restricted stock award of 400,000 shares of common stock.

In September 2020, the Company entered into an employment agreement with Sean Bohlen, M.D., Ph.D., to serve as the Company's Chief Executive Officer. Dr. Bohlen is entitled to an initial base salary, effective September 1, 2020, of \$0.5 million per year, and a performance bonus equal to 50% of his annual base salary (prorated for 2020), as determined by the Company's Board of Directors. In addition, Dr. Bohlen was granted an option to purchase 3,097,182 shares of common stock with an exercise price of \$1.73 per share.

In September 2020, the Company entered into an employment agreement with John Moriarty, J.D. to serve as the Company's Executive Vice President, Chief Legal Officer and Corporate Secretary. Mr. Moriarty is entitled to an initial base salary, effective September 8, 2020, of \$0.4 million per year, and a performance bonus equal to 35% of his annual base salary (prorated for 2020), as determined by the Company's Board of Directors. In addition, Mr. Moriarty was granted the option to purchase 702,744 shares of common stock with an exercise price of \$1.73 per share.

Stock Option Grants

Subsequent to December 31, 2019, the Company granted to certain directors, employees, and consultants options to purchase 7,124,074 shares of common stock (including the option grants described above) at exercise prices ranging from \$0.74 per share to \$1.73 per share.

During September 2020, in connection with the Non-Recourse Notes, all outstanding principal and accrued interest relating to the Non-Recourse Notes were fully repaid by the two noteholders, and as a result, the Company issued 490,000 and 100,000 shares of common stock to the noteholders, respectively.

15. Subsequent Events (Unaudited)

For the interim financial statements as of September 30, 2020 (unaudited), and for the nine months then ended, the Company evaluated subsequent events through October 23, 2020, the date on which those financial statements were issued.

shares



Common stock

Prospectus

J.P. Morgan

Jefferies

Cowen

Canaccord Genuity

, 2020

Part II

Information not required in prospectus

Unless otherwise indicated, all references to “Olema,” the “company,” “we,” “our,” “us” or similar terms refer to Olema Pharmaceuticals, 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, or SEC, registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and The Nasdaq Global Market, or Nasdaq, listing fee.

| | | |
|---|-----------|----------|
| SEC registration fee | \$ | * |
| FINRA filing fee | | * |
| Nasdaq listing fee | | * |
| Printing and engraving expenses | | * |
| Legal fees and expenses | | * |
| Accounting fees and expenses | | * |
| Custodian transfer agent and registrar fees | | * |
| Miscellaneous expenses | | * |
| Total | \$ | * |

* To be provided by amendment.

Item 14. Indemnification of directors and officers.

Section 145 of the Delaware General Corporation Law, or DGCL, authorizes a court to award, or a corporation’s board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act. Our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering permits indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the DGCL, and our amended and restated bylaws that will be in effect on the closing of this offering provide that we will indemnify our directors and officers and permit us to indemnify our employees and other agents, in each case to the maximum extent permitted by the DGCL.

We have entered into indemnification agreements with our directors and officers, whereby we have agreed to indemnify our directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee, or agent of Olema, provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interest of Olema.

At present, there is no pending litigation or proceeding involving a director or officer of Olema regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Securities Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

The underwriters are obligated, under certain circumstances, under the underwriting agreement to be filed as Exhibit 1.1 to this Registration Statement, to indemnify us and our officers and directors against liabilities under the Securities Act.

Item 15.Recent sales of unregistered securities.

Set forth below is information regarding unregistered securities issued by us since January 1, 2017.

Equity Plan-Related Issuances

1. Since January 1, 2017, we have granted to certain of our directors, employees and consultants options to purchase 7,159,074 shares of our common stock with per share exercise prices ranging from \$0.14 to \$1.73 under our 2014 Stock Plan, as amended, or the 2014 Plan.
2. Since January 1, 2017, we have issued to certain of our directors, employees and consultants an aggregate of 447,847 shares of our common stock at per share purchase prices ranging from \$0.14 to \$1.73 pursuant to exercises of options under the 2014 Plan for an aggregate purchase price of \$0.6 million.
3. Since January 1, 2017 we have granted to certain of our directors, employees and consultants 2,200,000 shares of restricted common stock under the 2014 Plan. These non-cash issuances were as consideration for services at a deemed price per share of \$0.74, for aggregate consideration of \$1.6 million.

Other Issuances of Capital Stock and Convertible Notes

4. Between April 2017 and April 2018, we issued to eight accredited investors convertible promissory notes for an aggregate principal amount of \$1.0 million. In July 2018, these notes converted into 1,439,313 shares of our Series A-1 convertible preferred stock and 359,937 shares of our common stock.
5. In January 2020, we issued to three accredited investors convertible promissory notes for an aggregate principal amount of \$3.0 million. In March 2020, these notes converted into 1,779,502 shares of our Series B convertible preferred stock.
6. In July 2018, we issued and sold an aggregate of 8,263,388 shares of our Series A-1 convertible preferred stock to 13 accredited investors at a purchase price per share of \$0.7327 for an aggregate purchase price of \$6.0 million, including the conversion of the notes in paragraph (4) above and accrued interest thereon.
7. Between March 2020 and June 2020, we issued and sold an aggregate of 31,893,492 shares of our Series B convertible preferred stock to 20 accredited investors at a purchase price per share of \$1.69 for an aggregate purchase price of \$53.9 million, including the conversion of the notes in paragraph (5) above and accrued interest thereon.
8. In September 2020, we issued and sold an aggregate of 22,036,764 shares of our Series C convertible preferred stock to 27 accredited investors at a purchase price per share of \$3.96782 for an aggregate purchase price of \$87.4 million.

The offers, sales and issuances of the securities described in paragraphs (1) through (3) 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 offers, sales and issuances of the securities described in paragraphs (4) through (8) 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.

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, as currently in effect. |
| 3.2+ | Form of Amended and Restated Certificate of Incorporation, to be in effect immediately after the closing of the offering. |
| 3.3 | Bylaws, as currently in effect. |
| 3.4+ | Form of Amended and Restated Bylaws, to be in effect on the closing of the offering. |
| 4.1+ | Form of Common Stock Certificate. |
| 4.2 | Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated September 30, 2020. |
| 5.1+ | Opinion of Cooley LLP. |
| 10.1† | Olema Pharmaceuticals, Inc. 2014 Stock Plan, as amended. |
| 10.2† | Forms of Stock Option Grant Notice, Stock Option Agreement and Notice of Exercise and Restricted Stock Award Grant Notice and Restricted Stock Award Agreement under the Olema Pharmaceuticals, Inc. 2014 Stock Plan. |
| 10.3+† | Olema Pharmaceuticals, Inc. 2020 Equity Incentive Plan. |
| 10.4+† | Forms of Stock Option Grant Notice and Stock Option Agreement under the Olema Pharmaceuticals, Inc. 2020 Equity Incentive Plan. |
| 10.5+† | Forms of Restricted Stock Unit Grant Notice and Award Agreement under the Olema Pharmaceuticals, Inc. 2020 Equity Incentive Plan. |
| 10.6+† | Olema Pharmaceuticals, Inc. 2020 Employee Stock Purchase Plan. |
| 10.7+† | Olema Pharmaceuticals, Inc. 2020 Non-Employee Director Compensation Policy. |
| 10.8† | Form of Indemnification Agreement by and between the Registrant and its directors and executive officers. |
| 10.9†# | Offer Letter by and between the Registrant and Sean Bohlen, dated September 1, 2020. |
| 10.10+† | Offer Letter by and between the Registrant and Cyrus L. Harmon, dated June 15, 2020. |
| 10.11†# | Offer Letter by and between the Registrant and Kinney Horn, dated May 14, 2020. |
| 10.12†# | Offer Letter by and between the Registrant and Shane Kovacs, dated June 15, 2020. |
| 10.13†# | Offer Letter by and between the Registrant and Peter Kushner, dated June 15, 2020. |
| 10.14†# | Offer Letter by and between the Registrant and David Myles, dated June 15, 2020. |
| 10.15†# | Offer Letter by and between the Registrant and John B. Moriarty, Jr., dated September 7, 2020. |
| 10.16*# | Clinical Collaboration and Supply Agreement by and between the Registrant and Novartis Institutes for BioMedical Research, Inc., dated July 22, 2020. |
| 23.1+ | Consent of independent registered public accounting firm. |
| 23.2+ | Consent of Cooley LLP (included in Exhibit 5.1). |
| 24.1+ | Power of Attorney (included on signature page). |

+ To be filed by amendment.

* Pursuant to Item 601(b)(10) of Regulation S-K, certain portions of this exhibit (indicated by [***]) have been omitted because the registrant has determined that the omitted information is not material and would likely cause competitive harm to the registrant if publicly disclosed.

† Indicates a management contract or compensatory plan.

Previously filed.

(b) Financial Statement Schedules.

All financial statement schedules are omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or the notes thereto.

Item 17. Undertakings.

(a) 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.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant under the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the U.S. Securities and Exchange Commission 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.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus filed by the registrant under Rule 424(b)(1) or (4) or 497(h) under the Securities Act will be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus will be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time will be deemed to be the initial bona fide offering thereof.

Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Francisco, State of California on _____, 2020.

OLEMA PHARMACEUTICALS, INC.

By: _____

Name: Sean Bohlen, M.D., Ph.D.

Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Sean Bohlen, M.D., Ph.D. and Shane Kovacs and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|-----------------------------------|---|-------------|
| _____ Sean Bohlen, M.D., Ph.D. | President, Chief Executive Officer and Director (Principal Executive Officer) | _____, 2020 |
| _____ Shane Kovacs | Chief Operating and Financial Officer (Principal Financial and Accounting Officer) | _____, 2020 |
| _____ Ian Clark | Chairperson of the Board | _____, 2020 |
| _____ Cynthia Butitta | Director | _____, 2020 |
| _____ Cyrus L. Harmon, Ph.D. | Director | _____, 2020 |

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--|--------------|-------------|
| <u>Gorjan Hrustanovic, Ph.D.</u> | Director | , 2020 |
| <u>Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon)</u> | Director | , 2020 |
| <u>Andrew Rappaport</u> | Director | , 2020 |
| <u>Graham Walmsley, M.D., Ph.D.</u> | Director | , 2020 |

**FIFTH AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
OLEMA PHARMACEUTICALS, INC.**

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Olema Pharmaceuticals, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "Delaware General Corporation Law"),

DOES HEREBY CERTIFY:

FIRST: That the name of this corporation is Olema Pharmaceuticals, Inc. (this "Corporation") and that this Corporation was originally incorporated pursuant to the Delaware General Corporation Law on August 7, 2006 under the name CombiThera, Inc.

SECOND: That the Board of Directors duly adopted resolutions proposing to amend and restate the Fourth Amended and Restated 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 sets forth the proposed amendment and restatement as follows:

* * *

ARTICLE I

The name of this Corporation is Olema Pharmaceuticals, Inc.

ARTICLE II

The address of this Corporation's registered office in the State of Delaware is National Registered Agents, Inc. The name of this Corporation's registered agent at such address is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801.

ARTICLE III

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 Delaware General Corporation Law.

ARTICLE IV

(A) **Classes of Stock.** The Corporation is authorized to issue two classes of stock, to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of stock that the Corporation is authorized to issue is 154,897,006, of which 88,000,000 shares shall be Common Stock and 66,897,006 shares shall be Preferred Stock. The Preferred Stock and Common Stock shall each have a par value of \$0.0001 per share.

(B) **Rights, Preferences and Restrictions of Preferred Stock.** 4,640,126 of the authorized shares of Preferred Stock are hereby designated Series A Preferred Stock ("**Series A Preferred Stock**"). 8,263,388 of the authorized shares of Preferred Stock are hereby designated Series A-1 Preferred Stock ("**Series A-1 Preferred Stock**"). 31,893,492 of the authorized shares of Preferred Stock are hereby designated Series B Preferred Stock ("**Series B Preferred Stock**"). 22,100,000 of the authorized shares of Preferred Stock are hereby designated Series C Preferred Stock ("**Series C Preferred Stock**"). The rights, preferences, privileges, and restrictions granted to and imposed on the Preferred Stock are as set forth below in this **Article IV(B)**.

1. **Dividend Provisions.** All dividends shall be declared pro rata on the Common Stock and the Preferred Stock on a pari passu basis according to the number of shares of Common Stock held by such holders. For this purpose each holder of shares of Preferred Stock is to be treated as holding the greatest whole number of shares of Common Stock then issuable upon conversion of all shares of Preferred Stock held by such holder pursuant to **Section 3**.

2. **Liquidation.**

(a) **Preference.**

(i) In the event of any liquidation, dissolution or winding up of this Corporation, either voluntary or involuntary, and in the event of a Liquidation Transaction (as defined below) the holders of shares of Preferred Stock then outstanding shall be entitled to receive, pari passu and on an equal priority basis, prior and in preference to any distribution of any of the assets of this Corporation to the holders of Common Stock, an amount per share equal to the applicable Original Issue Price, plus any dividends declared but unpaid thereon. If, upon the occurrence of such event, the assets thus distributed among the holders of Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets of this Corporation legally available for distribution shall be distributed ratably among the holders of Preferred Stock in proportion to the respective amounts that would otherwise be payable in respect of the shares under this **Section 2(a)** if all amounts payable on or with respect to such shares were paid in full. The "**Original Issue Price**" shall mean \$0.7278 per share for each share of Series A Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to such series of Preferred Stock), \$0.7327 per share for each share of Series A-1 Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to such series of Preferred Stock), \$1.69 per share for each share of Series B Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to such series of Preferred Stock) and \$3.96782 per share for each share of Series C Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to such series of Preferred Stock).

(ii) In the event of a Liquidation Transaction or other liquidation event, 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 or similar transaction document 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 as set forth herein as if the Initial Consideration were the only consideration payable in connection with such Liquidation Transaction or other liquidation event and (B) any Additional Consideration that 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 as set forth herein after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this **Section 2(a)(ii)**, consideration placed into escrow or retained as a holdback to be available for satisfaction of indemnification or similar obligations in connection with such Liquidation Transaction or other liquidation event shall be deemed to be Additional Consideration.

(b) **Remaining Assets.** Upon the completion of the distribution required by Section 2(a) above, the remaining assets of this Corporation available for distribution to stockholders shall be distributed among the holders of Common Stock pro rata based on the number of shares of Common Stock held by each such holder.

(c) **Deemed Conversion.** Notwithstanding the above, for purposes of determining the amount each holder of shares of Preferred Stock is entitled to receive with respect to a voluntary or involuntary liquidation, dissolution or winding up of the Corporation or a Liquidation Transaction, as defined below, each such holder of shares of a series of Preferred Stock shall be deemed to have converted (regardless of whether such holder actually converted) such holder's shares of such series into shares of Common Stock immediately prior to such liquidation, dissolution, winding up or Liquidation Transaction if, as a result of an actual conversion, such holder would receive, in the aggregate, an amount greater than the amount that would be distributed to such holder if such holder did not convert such series of Preferred Stock into shares of Common Stock. If any such holder shall be deemed to have converted shares of Preferred Stock into Common Stock pursuant to this paragraph, then such holder shall not be entitled to receive any distribution that would otherwise be made to holders of Preferred Stock that have not converted (or have not been deemed to have converted) into shares of Common Stock.

(d) **Certain Acquisitions.**

(i) **Deemed Liquidation.** For purposes of this Section 2, a liquidation, dissolution, or winding up of this Corporation shall be deemed to occur if this Corporation shall, in one transaction or a series of related transactions, (x) sell, convey, exclusively license or lease or otherwise dispose of all or substantially all of the property or business of this Corporation and its subsidiaries taken as a whole (an "Asset Sale"), (y) merge with or into or consolidate with any other corporation, limited liability company or other entity (other than a wholly-owned subsidiary of this Corporation), other than in a merger or consolidation 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, a majority of the capital stock of (1) the surviving or resulting entity or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent entity of such surviving or resulting entity, or (z) issue or transfer (whether by merger, consolidation or otherwise) this Corporation's securities to a person or group of affiliated persons (other than an underwriter of this Corporation's securities) such that immediately following the closing(s) of such transfer, such person or group of affiliated persons would hold 50% or more of the outstanding voting stock of this Corporation (or the surviving or acquiring entity) (any such transaction, a "Liquidation Transaction"), provided that none of the following shall be considered a Liquidation Transaction: (A) a merger effected exclusively for the purpose of changing the domicile of this Corporation; (B) a consolidation or merger with or into a wholly-owned subsidiary of this Corporation; (C) a bona fide equity financing primarily for capital raising purposes in which this Corporation is the surviving corporation, provided, that in each case, the stockholders of this Corporation immediately prior to the transaction own 50% or more of the voting capital stock (on an as converted basis) of the surviving corporation following the transaction. In the event of a merger or consolidation of this Corporation that is deemed pursuant to this Section 2(d)(i) to be a Liquidation Transaction, all references in this Section 2 (other than in this Section 2(d)(i)) to "assets of this Corporation" shall be deemed instead to refer to the aggregate consideration to be paid, if such Liquidation Transaction is an Asset Sale, to this Corporation, or otherwise, to the holders of this Corporation's capital stock in such Liquidation Transaction. Nothing in this Section 2(d)(i) shall require the distribution to stockholders of anything other than proceeds of such transaction in the event of a merger or consolidation of this Corporation. The holders of a majority of this Corporation's outstanding Preferred Stock, voting together as a single class on an as converted basis, shall be entitled to waive (by vote or written consent) the treatment of any transaction or series of related transactions as a Liquidation Transaction under this Section 2.

(ii) **Valuation of Consideration.** In the event of a deemed liquidation as described in Section 2(d)(i) above, if the consideration received by this Corporation is other than cash, its value will be deemed its fair market value as reasonably determined in good faith by the Board of Directors, including the approval of the Preferred Directors then in office. Any securities shall be valued as follows:

(A) Securities not subject to investment letter or other similar restrictions on free marketability:

(1) If traded on a securities exchange, then the value of the securities shall be deemed to be the average of the closing prices of the securities on such exchange over the ten trading day period ending five trading days prior to the distribution; or

(2) If actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten trading day period ending five trading days prior to the distribution; and

(3) 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.

For the purposes of this Section 2(d)(ii), “trading day” shall mean any day on which the exchange or system on which the securities to be distributed are traded is open and “closing prices” or “closing bid prices” shall be deemed to be: (i) for securities traded primarily on a New York Stock Exchange market or a Nasdaq market, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day; and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the regular hours trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

(B) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder’s status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as specified above in Section 2(d)(ii)(A) to reflect the approximate fair market value thereof, as determined in good faith by the Board of Directors.

(e) **Notice of Liquidation Transaction.** This Corporation shall give each holder of record of Preferred Stock written notice of any impending Liquidation Transaction not later than 20 days prior to the stockholders’ meeting called to approve such Liquidation Transaction, or 20 days prior to the closing of such Liquidation Transaction, whichever is earlier, and shall also notify such holders in writing of the final stockholder approval of such Liquidation Transaction. The first of such notices shall describe the material terms and conditions of the impending Liquidation Transaction. Unless such notice requirements are waived, the Liquidation Transaction shall not take place sooner than 20 days after this Corporation has given the first notice provided for herein or sooner than 10 days after this Corporation has given notice of any material changes. Notwithstanding the other provisions of this Fifth Amended and Restated Certificate of Incorporation (this “Certificate”), all notice periods or requirements in this Certificate may be shortened or waived, either before or after the action for which notice is required, upon the vote or written consent of the holders of a majority of this Corporation’s outstanding Preferred Stock (voting together as a separate class on an as converted basis) that are entitled to such notice rights.

(f) **Effect of Noncompliance.** In the event the requirements of Section 2(e) are not complied with, this Corporation shall forthwith either cause the closing of the Liquidation Transaction to be postponed until the requirements of this Section 2 have been complied with, or cancel such Liquidation Transaction, in which event the rights, preferences, privileges and restrictions of the holders of Preferred Stock shall revert to and be the same as such rights, preferences, privileges and restrictions existing immediately prior to the date of the first notice referred to in Section 2(e).

3. **Redemption.** The Preferred Stock is not redeemable at the option of any holder.

4. **Conversion.** The holders of shares of Preferred Stock shall be entitled to conversion rights as follows:

(a) **Right to Convert.** Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share, at the office of this Corporation or any transfer agent for such stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (i) the applicable Original Issue Price for such series of Preferred Stock by (ii) the applicable Conversion Price (as defined below) for such series of Preferred Stock in effect at the time of conversion; provided that such holder may waive such option to convert upon written notice to the Corporation. "Conversion Price" shall initially mean the Original Issue Price for such series of Preferred Stock. Such initial Conversion Price for each series of Preferred Stock shall be subject to adjustment as set forth in Section 4(d) below.

(b) **Automatic Conversion.** Each share of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Section 4(a), immediately upon the earlier of (i) except as provided below in Section 4(c), immediately prior to (A) this Corporation's sale of its Common Stock in a firm commitment underwritten public offering pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended (the "Securities Act") that results in gross cash proceeds to this Corporation of not less than \$50,000,000 (before deduction of underwriting discounts, concessions, commissions and expenses) (a "Qualified IPO") or (B) this Corporation's completion of a merger or consolidation with a special purpose acquisition company or its subsidiary in which the common stock (or similar securities) of the surviving or parent entity are listed on the New York Stock Exchange or the Nasdaq Stock Market and in connection with which the surviving or parent entity receives gross proceeds of at least \$50,000,000 from the sale of its equity securities (a "Qualified Merger"), or (ii) the date specified by vote or written consent of the holders of a majority of the then outstanding shares of Preferred Stock, voting together as a single class on an as converted basis.

(c) **Mechanics of Conversion.** Before any holder of Preferred Stock shall be entitled to convert such Preferred Stock into shares of Common Stock, the holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of this Corporation or of any transfer agent for such series of Preferred Stock, and shall give written notice to this Corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. This Corporation shall, as soon as practicable thereafter, (i) issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid and (ii) pay in cash or, to the extent sufficient funds are not then legally available therefor, in Common Stock (at the Common Stock's fair market value determined by the Board of Directors of the Corporation as of the date of such conversion), any declared and unpaid dividends on the shares of Preferred Stock being converted. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of such series of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with a firm commitment underwritten public offering of securities, the conversion may, at the option of any holder tendering such Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event any persons entitled to receive Common Stock upon conversion of such Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities. If the conversion is in connection with the automatic conversion provisions of clause (ii) of Section 4(b) above, such conversion shall be deemed to have been made on the conversion date described in the stockholder consent approving such conversion, and the person entitled to receive shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holders of such shares of Common Stock as of such date.

d) **Conversion Price Adjustments of Preferred Stock for Splits and Combinations.** The Conversion Price of each series of Preferred Stock shall be subject to adjustment from time to time as follows:

(i) **Issuance of Additional Stock Below Purchase Price.** If this Corporation should issue, at any time after the date upon which this Certificate is accepted for filing by the Secretary of State of the State of Delaware (the "Filing Date"), any Additional Stock (as defined below) without consideration or for a consideration per share less than the Conversion Price for a series of Preferred Stock in effect immediately prior to the issuance of such Additional Stock (as adjusted for stock splits, stock dividends, reclassification and the like), the Conversion Price for such series in effect immediately prior to each such issuance shall automatically be adjusted as set forth in this Section 4(d)(i), unless otherwise provided in this Section 4(d)(i).

(A) **Adjustment Formula.** Whenever the Conversion Price applicable to any series of Preferred Stock is adjusted pursuant to this Section 4(d)(i), the new Conversion Price for such series of Preferred Stock shall be determined by multiplying the Conversion Price for such series of Preferred Stock then in effect by a fraction, (x) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (the "Outstanding Common") plus the number of shares of Common Stock that the aggregate consideration received by this Corporation for such issuance would purchase at such Conversion Price; and (y) the denominator of which shall be the number of shares of Outstanding Common plus the number of shares of such Additional Stock. For purposes of the foregoing calculation, the term "Outstanding Common" shall include all shares of Common Stock issuable upon conversion of Preferred Stock and shares of Common Stock deemed issued pursuant to Section 4(d)(i)(E) below, such that the term Outstanding Common shall include all shares issuable upon exercise of any convertible securities, options, warrants or other securities convertible into or exercisable for shares of Common Stock.

(B) **Definition of "Additional Stock".** For purposes of this Section 4(d)(i), "Additional Stock" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to Section 4(d)(i)(E)) by this Corporation after the Filing Date, other than:

(1) securities issued pursuant to stock splits, stock dividends or similar transactions, as described in Section 4(d)(ii) hereof;

(2) securities issuable upon conversion, exchange or exercise of convertible, exchangeable or exercisable securities outstanding as of the Filing Date including, without limitation, warrants, notes or options;

(3) securities (or options therefor) issued or issuable to employees, consultants, officers or directors of this Corporation pursuant to stock option plans or restricted stock plans or agreements approved by the Board of Directors;

(4) Common Stock issued or issuable in a public offering;

(5) securities issued or issuable in connection with the acquisition by this Corporation of another company, entity or business that is approved by the Board of Directors, including the approval of the Preferred Directors then in office;

(6) securities issued or issuable to financial institutions, equipment or other lessors, brokers or similar persons in connection with commercial credit arrangements, financings, commercial property, equipment or other lease transactions, or similar transactions, in each case that is approved by the Board of Directors, including the Preferred Directors then in office, and primarily for non-equity financing purposes;

(7) securities issued or issuable to an entity as a component of any business relationship with such entity primarily for the purpose of (A) joint venture, technology licensing or development activities, (B) distribution, supply or manufacture of this Corporation's products or services or (C) any other arrangements involving corporate partners, in each case that is approved by the Board of Directors, including the Preferred Directors then in office, and primarily for non-equity financing purposes;

(8) Common Stock issued or issuable upon conversion of the Preferred Stock; and

(9) securities issued or issuable in any other transaction approved by the affirmative vote of a majority of the then-outstanding shares of Preferred Stock, voting together as a class on an as converted basis, pursuant to resolutions stating that such shares shall not be Additional Stock.

"Exempted Securities" shall mean (1) through (9) above.

(C) **No Fractional Adjustments.** No adjustment of the applicable Conversion Price for a series of Preferred Stock shall be made in an amount less than one cent per share, provided that any adjustments that are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three years from the date of the event giving rise to the adjustment being carried forward, or shall be made at the end of three years from the date of the event giving rise to the adjustment being carried forward.

(D) **Determination of Consideration.** In the case of the issuance of Common Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by this Corporation for any underwriting or otherwise in connection with the issuance and sale thereof. In the case of the issuance of the Common Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined by the Board of Directors irrespective of any accounting treatment.

(E) **Deemed Issuances of Common Stock.** In the case of the issuance of securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (the “Common Stock Equivalents”), the following provisions shall apply for all purposes of this Section 4(d)(i):

(1) The aggregate maximum number of shares of Common Stock deliverable upon conversion, exchange or exercise (assuming the satisfaction of any conditions to convertibility, exchangeability or exercisability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) of any Common Stock Equivalents and subsequent conversion, exchange or exercise thereof shall be deemed to have been issued at the time such securities were issued or such Common Stock Equivalents were issued and for a consideration equal to the consideration, if any, received by this Corporation for any such securities and related Common Stock Equivalents (excluding any cash received on account of accrued interest or accrued dividends), plus the minimum additional consideration, if any, to be received by this Corporation (without taking into account potential antidilution adjustments) upon the conversion, exchange or exercise of any Common Stock Equivalents (the consideration in each case to be determined in the manner provided in Section 4(d)(i)(D)).

(2) In the event of any change in the number of shares of Common Stock deliverable or in the consideration payable to this Corporation upon conversion, exchange or exercise of any Common Stock Equivalents, other than a change resulting from the antidilution provisions thereof, the Conversion Price of any series of Preferred Stock, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the conversion, exchange or exercise of such Common Stock Equivalents.

(3) Upon the termination or expiration of the convertibility, exchangeability or exercisability of any Common Stock Equivalents, the Conversion Price of any series of Preferred Stock, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect the issuance of only the number of shares of Common Stock (and Common Stock Equivalents that remain convertible, exchangeable or exercisable) actually issued upon the conversion, exchange or exercise of such Common Stock Equivalents.

(4) The number of shares of Common Stock deemed issued and the consideration deemed paid therefor pursuant to Section 4(d)(i)(D) shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either Section 4(d)(i)(E)(2) or (3).

(F) **No Increased Conversion Price.** Notwithstanding any other provisions of this Section 4(d)(i), except to the limited extent provided for in Sections 4(d)(i)(E)(2) and (3), no adjustment of the Conversion Price pursuant to this Section 4(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment.

(ii) **Stock Splits and Dividends.** In the event this Corporation should at any time after the Filing Date fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or Common Stock Equivalents without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend distribution, split or subdivision if no record date is fixed), the Conversion Price of each series of Preferred Stock that is convertible into Common Stock shall be appropriately 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 of the aggregate number of shares of Common Stock outstanding and those issuable with respect to such Common Stock Equivalents with the number of shares issuable with respect to Common Stock Equivalents determined from time to time in the manner provided for deemed issuances in Section 4(d)(i)(E).

(iii) **Reverse Stock Splits.** If the number of shares of Common Stock outstanding at any time after the Filing Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Price for each series of Preferred Stock that is convertible into Common Stock shall be appropriately 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 outstanding shares.

(e) **Other Distributions.** In the event this Corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by this Corporation or other persons, assets (excluding cash dividends) or options or rights not referred to in Section 4(d)(i) or in Section 4(d)(ii), then, in each such case for the purpose of this Section 4(e), the holders of each series of Preferred Stock that is convertible into Common Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of this Corporation into which their shares of Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of this Corporation entitled to receive such distribution.

(f) **Recapitalizations.** If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in Section 2 or this Section 4) provision shall be made so that the holders of each series of Preferred Stock that is convertible into Common Stock shall thereafter be entitled to receive upon conversion of such Preferred Stock the number of shares of stock or other securities or property of this Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of such Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the Conversion Price then in effect and the number of shares issuable upon conversion of such Preferred Stock) shall be applicable after that event and be as nearly equivalent as practicable.

(g) **No Fractional Shares and Certificate as to Adjustments.**

(i) No fractional shares shall be issued upon the conversion of any share or shares of Preferred Stock, and the number of shares of Common Stock to be issued shall be rounded down to the nearest whole share. The number of shares 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 number of shares of Common Stock issuable upon such aggregate conversion. If the conversion would result in any fractional share, this Corporation shall, in lieu of issuing any such fractional share, pay the holder thereof an amount in cash equal to the fair market value of such fractional share on the date of conversion, as determined in good faith by the Board of Directors.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of Preferred Stock pursuant to this Section 4, this Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof. This Corporation shall, upon the written request at any time of any holder of such Preferred Stock, furnish or cause to be furnished to such holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price for such series of Preferred Stock at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property that at the time would be received upon the conversion of a share of Preferred Stock.

(h) **Notices of Record Date.** In the event of any taking by this Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, this Corporation shall mail to each holder of Preferred Stock, at least 10 days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right. All notice periods or requirements in this Certificate may be shortened or waived, either before or after the action for which notice is required, upon the vote or written consent of the holders of a majority of this Corporation's outstanding Preferred Stock (voting together as a separate class on an as converted basis) that are entitled to such notice rights.

(i) **Reservation of Stock Issuable Upon Conversion.** This Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of each series of Preferred Stock that is convertible into Common Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of such series of 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 such series of Preferred Stock, in addition to such other remedies as shall be available to the holder of such Preferred Stock, this Corporation will take such corporate action as may, in the opinion of its counsel, 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 this Certificate.

(j) **Notices.** Any notice required by the provisions of this Section 4 to be given to the holders of shares of Preferred Stock shall be deemed given if deposited in the U.S. mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of this Corporation.

(k) **Waiver of Adjustment to Conversion Price.** Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived, either prospectively or retroactively and either generally or in a particular instance, only by the consent or vote of the holders of a majority of the outstanding shares of such series of Preferred Stock. Any such waiver shall bind all future holders of shares of such series of Preferred Stock. For clarity, the operation of Section 4(d)(i)(B)(9) shall not be deemed a waiver of any downward adjustment of the Conversion Price of any series of Preferred Stock for the purposes of this Section 4(k).

5. **Voting Rights.** Except as expressly provided by this Certificate or as provided by law, the holders of Preferred Stock shall have the same voting rights as the holders of Common Stock and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of this Corporation, and the holders of Common Stock and Preferred Stock shall vote together as a single class on all matters. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

6. **Protective Provisions.**

(a) The Corporation shall not without the prior written consent of (i) the holders of a majority of the outstanding shares of Preferred Stock (voting as a single class on an as-converted basis), and (ii) the holders of a majority of the outstanding shares of Common Stock, approve any liquidation, dissolution or wind-up of the business and affairs of the Corporation, effect any acquisition of the Corporation, merger, consolidation or sale or any other Liquidation Transaction, either directly or indirectly. 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.

(b) At any time when at least 16,564,286 shares of Preferred Stock (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations) remain outstanding, the Corporation shall not without the prior written consent of a majority of the Preferred Stock, voting together as a single class on an as converted to Common Stock basis (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):

(i) amend, alter or repeal any provision of this Amended and Restated Certificate of Incorporation or Bylaws of the Corporation;

(ii) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to any series of Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock of the Corporation unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

(iii) (x) reclassify, alter or amend any existing security of the Corporation that is pari passu with any series of 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 such series of Preferred Stock in respect of any such right, preference, or privilege or (y) reclassify, alter or amend any existing security of the Corporation that is junior to any series of 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 such series of Preferred Stock in respect of any such right, preference or privilege;

(iv) purchase or redeem any capital stock, other than stock repurchased from former employees or consultants in connection with the cessation of their employment/services, or pay any dividend on any capital stock;

(v) create, or authorize the creation of, or issue, or authorize the issuance of any debt security or create any lien or security interest (except for purchase money liens or statutory liens of landlords, mechanics, materialmen, workmen, warehousemen and other similar persons arising or incurred in the ordinary course of business) or incur other indebtedness for borrowed money, including but not limited to obligations and contingent obligations under guarantees, or permit any subsidiary to take any such action with respect to any debt security lien, security interest or other indebtedness for borrowed money, if the aggregate indebtedness of the Corporation and its subsidiaries for borrowed money following such action would exceed \$250,000, other than equipment leases or bank lines of credit incurred in the ordinary course; or

(vi) increase or decrease the authorized number of directors constituting the Board of Directors.

(c) At any time when at least 1,160,032 shares of Series A Preferred Stock remain outstanding (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations), the Corporation shall not without the consent of the holders of a majority of the outstanding shares of Series A Preferred Stock (voting as a single class on an as-converted basis), alter or change the rights, powers or privileges of the Series A Preferred Stock set forth in the Certificate in a way that adversely affects the Series A Preferred Stock. For the avoidance of doubt, an increase in the authorized number of shares of Common Stock or Preferred Stock (other than an increase in the number of shares of Series A Preferred Stock) and the designation, creation and issuance of a new series of preferred stock or any other security convertible into or exercisable for any equity security, that is pari passu or senior to the Series A Preferred Stock shall not be deemed to be an adverse change to the rights of the Series A Preferred Stock (provided, however, that after the issuance of such new securities the consent of the holders of a majority of the outstanding shares of Series A Preferred Stock is required to alter or change the rights, powers or privileges of the Series A Preferred Stock).

(d) At any time when at least 2,065,847 shares of Series A-1 Preferred Stock remain outstanding (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations), the Corporation shall not without the prior written consent of the holders of a majority of the outstanding shares of Series A-1 Preferred Stock (voting as a single class on an as-converted basis), alter or change the rights, powers or privileges of the Series A-1 Preferred Stock set forth in the Certificate in a way that adversely affects the Series A-1 Preferred Stock 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. For the avoidance of doubt, an increase in the authorized number of shares of the Common Stock or Preferred Stock (other than an increase in the number of shares of Series A-1 Preferred Stock) and the designation, creation and issuance of a new series of preferred stock or any other security convertible into or exercisable for any equity security, that is pari passu or senior to the Series A-1 Preferred Stock shall not be deemed to be an adverse change to the rights of the Series A-1 Preferred Stock (provided, however, that the prior written consent of the holders of a majority of the outstanding shares of Series A-1 Preferred Stock is required to alter or change the rights, powers or privileges of the Series A-1 Preferred Stock).

(e) At any time when at least 7,973,373 shares of Series B Preferred Stock remain outstanding (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations), the Corporation shall not without the prior written consent of the holders of a majority of the outstanding shares of Series B Preferred Stock (voting as a single class on an as-converted basis), alter or change the rights, powers or privileges of the Series B Preferred Stock set forth in the Certificate in a way that adversely affects the Series B Preferred Stock 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. For the avoidance of doubt, an increase in the authorized number of shares of the Common Stock or Preferred Stock (other than an increase in the number of shares of Series B Preferred Stock) and the designation, creation and issuance of a new series of preferred stock or any other security convertible into or exercisable for any equity security, that is pari passu or senior to the Series B Preferred Stock shall not be deemed to be an adverse change to the rights of the Series B Preferred Stock (provided, however, that the prior written consent of the holders of a majority of the outstanding shares of Series B Preferred Stock is required to alter or change the rights, powers or privileges of the Series B Preferred Stock).

(f) At any time when at least 5,509,191 shares of Series C Preferred Stock remain outstanding (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations), the Corporation shall not without the prior written consent of the holders of a majority of the outstanding shares of Series C Preferred Stock (voting as a single class on an as-converted basis), alter or change the rights, powers or privileges of the Series C Preferred Stock set forth in the Certificate in a way that adversely affects the Series C Preferred Stock 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. For the avoidance of doubt, an increase in the authorized number of shares of the Common Stock or Preferred Stock (other than an increase in the number of shares of Series C Preferred Stock) and the designation, creation and issuance of a new series of preferred stock or any other security convertible into or exercisable for any equity security, that is pari passu or senior to the Series C Preferred Stock shall not be deemed to be an adverse change to the rights of the Series C Preferred Stock (provided, however, that the prior written consent of the holders of a majority of the outstanding shares of Series C Preferred Stock is required to alter or change the rights, powers or privileges of the Series C Preferred Stock).

7. **Status of Converted Stock.** In the event any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted shall be cancelled and shall not be issuable by this Corporation. This Certificate shall be appropriately amended to effect the corresponding reduction in this Corporation's authorized capital stock.

8. **Election of Directors.** So long as any shares of Series B Preferred Stock are outstanding, the holders of record of the shares of Series B Preferred Stock, voting together as a separate class on an as-converted basis, shall be entitled to elect two directors of this Corporation (each a "Series B Preferred Director"). So long as any shares of Series C Preferred Stock are outstanding, the holders of record of the shares of Series C Preferred Stock, voting together as a separate class on an as-converted basis, shall be entitled to elect one director of this Corporation (the "Series C Preferred Director" and together with the Series B Preferred Directors, the "Preferred Directors"). The holders of record of the shares of Common Stock, voting together as a separate class on an as-converted basis, shall be entitled to elect two directors of this Corporation (each, a "Common Director"). The holders of record of the Common Stock and Preferred Stock, voting together, shall be entitled to elect the balance of the total number of authorized directors of this Corporation (each an "At Large Director"). Each director shall have one vote on each matter submitted to a vote of the Board of Directors. Any director elected as provided herein may be removed with or without cause by, and only by, the affirmative vote of the holders of the shares of the classes, class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. In the case of election of the Preferred Directors and the Common Directors, if the holders of shares of Series B Preferred Stock, Series C Preferred Stock or Common Stock, as the case may be, 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 this Section 8, then any directorship not so filled shall remain vacant until such time as the holders of Series B Preferred Stock, Series C Preferred Stock or Common Stock, as the case may be, 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 this Corporation other than by the stockholders of this Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. 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 classes, 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 Section 8, a vacancy in any directorship filled by the holders of Series B Preferred Stock, Series C Preferred Stock or Common Stock 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 Section 8.

(C) **Rights, Preferences and Restrictions of Common Stock.**

1. **Dividend Rights.** The holders of shares of Common Stock shall be entitled to receive dividends in accordance with Section 1 of Article IV(B).
2. **Liquidation Rights.** Upon the liquidation, dissolution or winding up of this Corporation, or the occurrence of a Liquidation Transaction, the assets of this Corporation shall be distributed as provided in Section 2 of Article IV(B).
3. **Redemption.** The Common Stock is not redeemable at the option of any holder.
4. **Voting Rights.** Each holder of Common Stock shall have the right to one vote per share of Common Stock. Each holder of Common Stock shall be entitled to notice of any stockholders' meeting at which the holders of Common Stock are entitled to vote in accordance with the Bylaws of this Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law. 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 this Certificate) the affirmative vote of the holders of shares of capital stock of this Corporation representing a majority of the votes represented by all outstanding shares of capital stock of this Corporation entitled to vote, on an as-converted basis, irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law.

ARTICLE V

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 this Corporation without any action on the part of the stockholders; provided, however, that the stockholders may adopt, amend or repeal any Bylaw adopted by the Board of Directors.

ARTICLE VI

Elections of directors need not be by written ballot unless the Bylaws of this Corporation shall so provide.

ARTICLE VII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of this Corporation may provide. The books of this Corporation may be kept (subject to any provision contained in the statutes) 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 this Corporation.

ARTICLE VIII

A director of this Corporation shall, to the fullest extent permitted by the Delaware General Corporation Law as it now exists or as it may hereafter be amended, not be personally liable to this Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the Delaware General Corporation Law is amended after approval by the stockholders of this Article VIII to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of this Corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Any amendment, repeal or modification of this Article VIII, or the adoption of any provision of this Certificate inconsistent with this Article VIII by the stockholders of this Corporation shall not adversely affect any right or protection of a director of this Corporation existing at the time of, or increase the liability of any director of this Corporation existing at the time of such amendment, repeal, modification or adoption.

ARTICLE IX

To the fullest extent permitted by applicable law, this Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of this Corporation (and any other persons to which Delaware law permits this 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 Delaware General Corporation Law.

Any amendment, repeal or modification of this Article IX, or the adoption of any provision of this Certificate inconsistent with this Article IX by the stockholders of this Corporation shall not apply to or adversely affect any right or protection of any director, officer or other agent of this Corporation existing at the time of such amendment, repeal, modification or adoption.

ARTICLE X

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware and any appellate court therefrom shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of this Corporation, (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of this Corporation to this Corporation or this Corporation's stockholders, (iii) any action or proceeding asserting a claim against this Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or this Corporation's certificate of incorporation or bylaws or (iv) any action or proceeding asserting a claim against this Corporation or its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), that is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article X shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article X (including, without limitation, each portion of any sentence of this Article X containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

ARTICLE XI

This Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of this 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 that otherwise comes into the possession of, (i) any director of this Corporation who is not an employee of this 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 this Corporation or any of its subsidiaries (collectively, “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 this Corporation while such Covered Person is performing services in such capacity.

ARTICLE XII

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 from employees, officers, directors or consultants of this 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), 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.

* * *

THIRD: 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 Delaware General Corporation Law.

FOURTH: That this Fifth Amended and Restated 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 Delaware General Corporation Law.

This Fifth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this Corporation on September 29, 2020.

/s/ Shane Kovacs
Shane Kovacs
Chief Financial Officer

SIGNATURE PAGE TO FIFTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

**BYLAWS OF
COMBITHERA, INC.**

**ARTICLE I
STOCKHOLDERS**

1.1 Place of Meetings. All meetings of stockholders shall be held at such place within or without the State of Delaware as may be designated from time to time by the Board of Directors or the President and Chief Executive Officer.

1.2 Annual Meeting. The annual meeting of stockholders for the election of directors and for the transaction of such other business as may properly be brought before the meeting shall be held on a date to be fixed by the Board of Directors at the time and place to be fixed by the Board of Directors and stated in the notice of the meeting.

1.3 Special Meetings. Special meetings of stockholders may be called at any time by the Board of Directors, the Chairman of the Board or the President or the holders of record of not less than 10% of all shares entitled to cast votes at the meeting, for any purpose or purposes prescribed in the notice of the meeting and shall be held at such place, on such date and at such time as the Board may fix. Business transacted at any special meeting of stockholders shall be confined to the purpose or purposes stated in the notice of meeting.

1.4 Notice of Meetings. Written notice of each meeting of stockholders, whether annual or special, shall be given not less than 10 nor more than 60 days before the date on which the meeting is to be held, to each stockholder entitled to vote at such meeting, except as otherwise provided herein or as required by law (meaning here and hereafter, as required from time to time by the Delaware General Corporation Law or the Certificate of Incorporation). The notices of all meetings shall state the place, date and hour of the meeting. The notice of a special meeting shall state, in addition, the purpose or purposes for which the meeting is called. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the corporation.

1.5 Voting List. The officer who has charge of the stock ledger of the corporation shall prepare, at least 10 days before each 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. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least 10 days prior to the meeting, at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time of the meeting, and may be inspected by any stockholder who is present. This list shall determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

1.6 Quorum. Except as otherwise provided by law or these Bylaws, the holders of a majority of the shares of the capital stock of the corporation entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business. If a quorum shall fail to attend any meeting, the chairman of the meeting or the holders of a majority of the shares of stock entitled to vote who are present, in person or by proxy, may adjourn the meeting to another place, date or time.

If a notice of any adjourned special meeting of stockholders is sent to all stockholders entitled to vote thereat, stating that it will be held with those present constituting a quorum, then except as otherwise required by law, those present at such adjourned meeting shall constitute a quorum, and all matters shall be determined by a majority of the votes cast at such meeting.

1.7 Adjournments. Any meeting of stockholders may be adjourned to any other time and to any other place at which a meeting of stockholders may be held under these Bylaws by the Chairman of the meeting or, in the absence of such person, by any officer entitled to preside at or to act as Secretary of such meeting, or by the holders of a majority of the shares of stock present or represented at the meeting and entitled to vote, although less than a quorum. When a meeting is adjourned to another place, date or time, written notice need not be given of the adjourned meeting if the place, date and time thereof are announced at the meeting at which the adjournment is taken; provided, however, that if the date of any adjourned meeting is more than 30 days after the date for which the meeting was originally noticed, or if a new record date is fixed for the adjourned meeting, written notice of the place, date, and time of the adjourned meeting shall be given in conformity herewith. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting.

1.8 Voting and Proxies. Each stockholder shall have one vote for each share of stock entitled to vote held of record by such stockholder and a proportionate vote for each fractional share so held, unless otherwise provided by law or in the Certificate of Incorporation. Each stockholder of record entitled to vote at a meeting of stockholders may vote in person or may authorize any other person or persons to vote or act for him by written proxy executed by the stockholder or his authorized agent or by a transmission permitted by law and delivered to the Secretary of the corporation. No stockholder may authorize more than one proxy for his shares. Any copy, facsimile transmission or other reliable reproduction of the writing or transmission created pursuant to this Section may be substituted 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 transmission or other reproduction shall be a complete reproduction of the entire original writing or transmission.

1.9 Action at Meeting. When a quorum is present at any meeting, any election shall be determined by a plurality of the votes cast by the stockholders entitled to vote at the election, and all other matters shall be determined by a majority of the votes cast affirmatively or negatively on the matter (or if there are two or more classes of stock entitled to vote as separate classes, then in the case of each such class, a majority of each such class present or represented and voting affirmatively or negatively on the matter) shall decide such matter, except when a different vote is required by express provision of law, the Certificate of Incorporation or these Bylaws.

All voting, including on the election of directors, but excepting where otherwise required by law, may be by a voice vote; provided, however, that upon demand therefor by a stockholder entitled to vote or his or her proxy, a stock vote shall be taken. Every stock vote shall be taken by ballot, each of which shall state the name of the stockholder or proxy voting and such other information as may be required under the procedure established for the meeting. Every vote taken by ballot shall be counted by an inspector or inspectors appointed by the chairman of the meeting. The corporation may, and to the extent required by law, shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The corporation may designate one or more persons as an alternate inspector to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting may, and to the extent required by law, shall, appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath to faithfully execute the duties of inspector with strict impartiality and according to the best of his or her ability.

1.10 Stockholder Action Without Meeting. Any action which may be taken at any annual or special meeting of stockholders may be taken without a meeting and without prior notice, if a consent in writing, setting forth the actions so taken, is signed by the holders of outstanding shares having not less than the minimum number of votes which would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. All such consents shall be filed with the Secretary of the corporation and shall be maintained in the corporate records. Prompt notice of the taking of a corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

An electronic transmission consenting to an action to be taken and transmitted by a stockholder, or by a proxy holder or other person authorized to act for a stockholder, shall be deemed to be written, signed and dated for the purpose of this Section 1.10, provided that such electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the electronic transmission was transmitted by the stockholder or by a person authorized to act for the stockholder and (ii) the date on which such stockholder or authorized person transmitted such electronic transmission. The date on which such electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its principal place of business or an officer or agent of the corporation having custody of the books in which proceedings of meetings of stockholders are recorded.

1.11 Meetings by Remote Communication. If authorized by the Board of Directors, and subject to such guidelines and procedures as the Board may adopt, stockholders and proxy holders not physically present at a meeting of stockholders may, by means of remote communication, participate in the meeting and be deemed present in person and vote at the meeting, whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxy holder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxy holders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxy holder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

ARTICLE II
BOARD OF DIRECTORS

2.1 General Powers. The business and affairs of the corporation shall be managed by or under the direction of a Board of Directors, who may exercise all of the powers of the corporation except as otherwise provided by law or the Certificate of Incorporation. In the event of a vacancy in the Board of Directors, the remaining directors, except as otherwise provided by law, may exercise the powers of the full Board until the vacancy is filled.

2.2 Number and Term of Office. The number of directors shall initially be two (2) and, thereafter, shall be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board for adoption). All directors shall hold office until the expiration of the term for which elected and until their respective successors are elected, except in the case of the death, resignation or removal of any director.

2.3 Vacancies and Newly Created Directorships. Subject to the rights of the holders of any series of Preferred Stock then outstanding, newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board of Directors resulting from death, resignation, retirement, disqualification or other cause (other than removal from office by a vote of the stockholders) may be filled only by a majority vote of the directors then in office, though less than a quorum, or by the sole remaining director, and directors so chosen shall hold office for a term expiring at the next annual meeting of stockholders. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

2.4 Resignation. Any director may resign by delivering notice in writing or by electronic transmission to the President, Chairman of the Board or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

2.5 Removal. Subject to the rights of the holders of any series of Preferred Stock then outstanding, any directors, or the entire Board of Directors, may be removed from office at any time, with or without cause, by the affirmative vote of the holders of a majority of the voting power of all of the outstanding shares of capital stock entitled to vote generally in the election of directors, voting together as a single class. Vacancies in the Board of Directors resulting from such removal may be filled by a majority of the directors then in office, though less than a quorum, by the sole remaining director, or by the stockholders at the next annual meeting or at a special meeting called in accordance with Section 1.3 above. Directors so chosen shall hold office until the next annual meeting of stockholders.

2.6 Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and place, either within or without the State of Delaware, as shall be determined from time to time by the Board of Directors; provided that any director who is absent when such a determination is made shall be given notice of the determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

2.7 Special Meetings. Special meetings of the Board of Directors may be called by the Chairman of the Board, the President or two or more directors and may be held at any time and place, within or without the State of Delaware.

2.8 Notice of Special Meetings. Notice of any special meeting of directors shall be given to each director by the Secretary or by the officer or one of the directors calling the meeting. Notice shall be duly given to each director by (i) giving notice to such director in person or by telephone, electronic transmission or voice message system at least 24 hours in advance of the meeting, (ii) sending a facsimile, or delivering written notice by hand, to his last known business or home address at least 24 hours in advance of the meeting, or (iii) mailing written notice to his last known business or home address at least three days in advance of the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

2.9 Participation in Meetings by Telephone Conference Calls or Other Methods of Communication. Directors or any members of any committee designated by the directors may participate in a meeting of the Board of Directors or such committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation by such means shall constitute presence in person at such meeting.

2.10 Quorum. A majority of the total number of authorized directors shall constitute a quorum at any meeting of the Board of Directors. In the event one or more of the directors shall be disqualified to vote at any meeting, then the required quorum shall be reduced by one for each such director so disqualified; provided, however, that in no case shall less than 1/3 of the number so fixed constitute a quorum. In the absence of a quorum at any such meeting, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present. Interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or at a meeting of a committee which authorizes a particular contract or transaction.

2.11 Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of those present shall be sufficient to take any action, unless a different vote is specified by law, the Certificate of Incorporation or these Bylaws.

2.12 Action by Written Consent. Any action required or permitted to be taken at any meeting of the Board of Directors or of any committee of the Board of Directors may be taken without a meeting if all members of the Board or committee, as the case may be, consent to the action in writing or by electronic transmission, and the writings or electronic transmissions are filed with the minutes of proceedings of the Board or committee. 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.

2.13 Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation, with such lawfully delegated powers and duties as it therefor confers, to serve at the pleasure of the Board. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members of the committee present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors and subject to the provisions of the Delaware General Corporation Law, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation and may authorize the seal of the corporation to be affixed to all papers which may require it. Each such committee shall keep minutes and make such reports as the Board of Directors may from time to time request. Except as the Board of Directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these Bylaws for the Board of Directors.

2.14 Compensation of Directors. Directors may be paid such compensation for their services and such reimbursement for expenses of attendance at meetings as the Board of Directors may from time to time determine. No such payment shall preclude any director from serving the corporation or any of its parent or subsidiary corporations in any other capacity and receiving compensation for such service.

2.15 Nomination of Director Candidates. Subject to the rights of holders of any class or series of Preferred Stock then outstanding, nominations for the election of Directors may be made by (i) the Board of Directors or a duly authorized committee thereof or (ii) any stockholder entitled to vote in the election of Directors.

ARTICLE III OFFICERS

3.1 Enumeration. The officers of the corporation shall consist of a Chief Executive Officer, a President, a Secretary, a Chief Financial Officer, a Treasurer and such other officers with such other titles as the Board of Directors shall determine, including, at the discretion of the Board of Directors, a Chairman of the Board and one or more Vice Presidents and Assistant Secretaries. The Board of Directors may appoint such other officers as it may deem appropriate.

3.2 Election. Officers shall be elected annually by the Board of Directors at its first meeting following the annual meeting of stockholders. Officers may be appointed by the Board of Directors at any other meeting.

3.3 Qualification. No officer need be a stockholder. Any two or more offices may be held by the same person.

3.4 Tenure. Except as otherwise provided by law, by the Certificate of Incorporation or by these Bylaws, each officer shall hold office until his successor is elected and qualified, unless a different term is specified in the vote appointing him, or until his earlier death, resignation or removal.

3.5 Resignation and Removal. Any officer may resign by delivering his written resignation to the corporation at its principal office or to the President or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event. Any officer elected by the Board of Directors may be removed at any time, with or without cause, by the Board of Directors.

3.6 Chairman of the Board. The Board of Directors may appoint a Chairman of the Board. If the Board of Directors appoints a Chairman of the Board, he shall perform such duties and possess such powers as are assigned to him by the Board of Directors. Unless otherwise provided by the Board of Directors, he shall preside at all meetings of the stockholders, and, if he is a director, at all meetings of the Board of Directors.

3.7 President. The President shall, subject to the direction of the Board of Directors, have responsibility for the general management and control of the business and affairs of the corporation and shall perform all duties and have all powers which are commonly incident to the office of President or which are delegated to him or her by the Board of Directors. Unless otherwise designated by the Board of Directors, the President shall be the Chief Executive Officer of the corporation. The President shall, in the absence of or because of the inability to act of the Chairman of the Board, perform all duties of the Chairman of the Board and preside at all meetings of the Board of Directors and of stockholders. The President shall perform such other duties and shall have such other powers as the Board of Directors may from time to time prescribe. He or she shall have power to sign stock certificates, contracts and other instruments of the corporation which are authorized and shall have general supervision and direction of all of the other officers, employees and agents of the corporation, other than the Chairman of the Board.

3.8 Vice Presidents. Any Vice President shall perform such duties and possess such powers as the Board of Directors or the President may from time to time prescribe. In the event of the absence, inability or refusal to act of the President, the Vice President (or if there shall be more than one, the Vice Presidents in the order determined by the Board of Directors) shall perform the duties of the President and when so performing shall have at the powers of and be subject to all the restrictions upon the President. The Board of Directors may assign to any Vice President the title of Executive Vice President, Senior Vice President or any other title selected by the Board of Directors.

3.9 Secretary and Assistant Secretaries. The Secretary shall perform such duties and shall have such powers as the Board of Directors or the President may from time to time prescribe. In addition, the Secretary shall perform such duties and have such powers as are incident to the office of the Secretary, including, without limitation, the duty and power to give notices of all meetings of stockholders and special meetings of the Board of Directors, to keep a record of the proceedings of all meetings of stockholders and the Board of Directors, to maintain a stock ledger and prepare lists of stockholders and their addresses as required, to be custodian of corporate records and the corporate seal and to affix and attest to the same on documents.

Any Assistant Secretary shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer, the President or the Secretary may from time to time prescribe. In the event of the absence, inability or refusal to act of the Secretary, the Assistant Secretary (or if there shall be more than one, the Assistant Secretaries in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Secretary.

In the absence of the Secretary or any Assistant Secretary at any meeting of stockholders or directors, the person presiding at the meeting shall designate a temporary secretary to keep a record of the meeting.

3.10 Chief Financial Officer. Unless otherwise designated by the Board of Directors, the Chief Financial Officer shall be the Treasurer. The Chief Financial Officer shall perform such duties and shall have such powers as may from time to time be assigned to him by the Board of Directors, the Chief Executive Officer or the President. In addition, the Chief Financial Officer shall perform such duties and have such powers as are incident to the office of chief financial officer, including without limitation, the duty and power to keep and be responsible for all funds and securities of the corporation, to maintain the financial records of the corporation, to deposit funds of the corporation in depositories as authorized, to disburse such funds as authorized, to make proper accounts of such funds, and to render as required by the Board of Directors accounts of all such transactions and of the financial condition of the corporation.

3.11 Salaries. Officers of the corporation shall be entitled to such salaries, compensation or reimbursement as shall be fixed or allowed from time to time by the Board of Directors.

3.12 Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers or agents, notwithstanding any provision hereof.

**ARTICLE IV
CAPITAL STOCK**

4.1 Issuance of Stock. Unless otherwise voted by the stockholders and subject to the provisions of the Certificate of Incorporation, the whole or any part of any unissued balance of the authorized capital stock of the corporation or the whole or any part of any unissued balance of the authorized capital stock of the corporation held in its treasury may be issued, sold, transferred or otherwise disposed of by vote of the Board of Directors in such manner, for such consideration and on such terms as the Board of Directors may determine.

4.2 Certificates of Stock; Uncertificated Shares. The shares of the corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of the corporation's stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock of the corporation represented by certificates shall be entitled to have a certificate, in such form as may be prescribed by law and by the Board of Directors, representing the number of shares held by such holder registered in certificate form. Each such certificate shall be signed in a manner that complies with Section 158 of the General Corporation Law of the State of Delaware.

4.3 Transfers. Except as otherwise established by rules and regulations adopted by the Board of Directors, and subject to applicable law, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written assignment or power of attorney properly executed, and with such proof of authority or authenticity of signature as the corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, the Certificate of Incorporation or the 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 to such stock, 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.

4.4 Lost, Stolen or Destroyed Certificates. The corporation may issue a new certificate of stock in place of any previously issued certificate alleged to have been lost, stolen, or destroyed, upon such terms and conditions as the Board of Directors may prescribe, including the presentation of reasonable evidence of such loss, theft or destruction and the giving of such indemnity as the Board of Directors may require for the protection of the corporation or any transfer agent or registrar.

4.5 Record Date. The Board of Directors may fix in advance a record date for the determination of the stockholders entitled to notice of or to vote at any meeting of stockholders or to express consent (or dissent) to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights in respect of any change, concession or exchange of stock, or for the purpose of any other lawful action. Such record date shall not be more than 60 nor less than 10 days before the date of such meeting, nor more than 60 days prior to any other action to which such record date relates.

If no record date is fixed, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, or, if notice is waived, at the close of business on the day before the day on which the meeting is held. The record date for determining stockholders entitled to express consent to corporate action in writing without a meeting when no prior action by the Board of Directors is necessary, shall be the day on which the first written consent is expressed. The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating to such purpose.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

ARTICLE V
GENERAL PROVISIONS

5.1 Fiscal Year. The fiscal year of the corporation shall be as fixed by the Board of Directors.

5.2 Corporate Seal. The corporate seal shall be in such form as shall be approved by the Board of Directors.

5.3 Waiver of Notice. Whenever any notice whatsoever is required to be given by law, by the Certificate of Incorporation or by these Bylaws, a waiver of such notice either in writing signed by the person entitled to such notice or such person's duly authorized attorney, or by electronic transmission or any other method permitted under the Delaware General Corporation Law, whether before, at or after the time stated in such waiver, or the appearance of such person or persons at such meeting in person or by proxy, shall be deemed equivalent to such notice.

5.4 Actions with Respect to Securities of Other Corporations. Except as the Board of Directors may otherwise designate, the Chief Executive Officer or President or any officer of the corporation authorized by the Chief Executive Officer or President shall have the power to vote and otherwise act on behalf of the corporation, in person or proxy, and may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact to this corporation (with or without power of substitution) at any meeting of stockholders or shareholders (or with respect to any action of stockholders) of any other corporation or organization, the securities of which may be held by this corporation and otherwise to exercise any and all rights and powers which this corporation may possess by reason of this corporation's ownership of securities in such other corporation or other organization.

5.5 Evidence of Authority. A certificate by the Secretary, or an Assistant Secretary, or a temporary Secretary, as to any action taken by the stockholders, directors, a committee or any officer or representative of the corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

5.6 Certificate of Incorporation. All references in these Bylaws to the Certificate of Incorporation shall be deemed to refer to the Certificate of Incorporation of the corporation, as amended and in effect from time to time.

5.7 Severability. Any determination that any provision of these Bylaws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these Bylaws.

5.8 Pronouns. All pronouns used in these Bylaws shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

5.9 Notices. Except as otherwise specifically provided herein or required by law, all notices required to be given to any stockholder, director, officer, employee or agent shall be in writing and may in every instance be effectively given by hand delivery to the recipient thereof, by depositing such notice in the mails, postage paid, or by sending such notice by facsimile or other electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law, or by commercial courier service. Any such notice shall be addressed to such stockholder, director, officer, employee or agent at his or her last known address as the same appears on the books of the corporation. The time when such notice shall be deemed to be given shall be the time such notice is received by such stockholder, director, officer, employee or agent, or by any person accepting such notice on behalf of such person, if delivered by hand, facsimile, other electronic transmission or commercial courier service, or the time such notice is dispatched, if delivered through the mails.

5.10 Reliance Upon Books, Reports and Records. Each director, each member of any committee designated by the Board of Directors, and each officer of the corporation shall, in the performance of his duties, be fully protected in relying in good faith upon the books of account or other records of the corporation, including reports made to the corporation by any of its officers, by an independent certified public accountant, or by an appraiser selected with reasonable care.

5.11 Time Periods. In applying any provision of these Bylaws which require that an act be done or not done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

5.12 Facsimile Signatures. In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the corporation may be used whenever and as authorized by the Board of Directors or a committee thereof.

5.13 Annual Report. For so long as the corporation has fewer than 100 holders of record of its shares, the mandatory requirement of an annual report under Section 1501 of the California Corporations Code is hereby expressly waived.

**ARTICLE VI
AMENDMENTS**

6.1 By the Board of Directors. Except as is otherwise set forth in these Bylaws, these Bylaws may be altered, amended or repealed or new Bylaws may be adopted by the affirmative vote of a majority of the directors present at any regular or special meeting of the Board of Directors at which a quorum is present.

6.2 By the Stockholders. Except as otherwise set forth in these Bylaws, these Bylaws may be altered, amended or repealed or new Bylaws may be adopted by the affirmative vote of the holders of at least a majority of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at any annual meeting of stockholders, or at any special meeting of stockholders, provided notice of such alteration, amendment, repeal or adoption of new Bylaws shall have been stated in the notice of such special meeting.

**ARTICLE VII
INDEMNIFICATION OF DIRECTORS AND OFFICERS**

7.1 Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative ("proceeding"), by reason of the fact that he or she or a person of whom he or she is the legal representative, is or was a director or officer of the corporation or is or was serving at the request of the corporation as a director or officer of another corporation, or as a controlling person of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director or officer, or in any other capacity while serving as a director or officer, shall be indemnified and held harmless by the corporation to the fullest extent authorized by the Delaware General Corporation Law, 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 said Law permitted the corporation to provide prior to such amendment) against all expenses, liability and loss reasonably incurred or suffered by such person in connection therewith and such indemnification shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that except as provided in Section 7.2 of this Article VII, the corporation shall indemnify any such person seeking indemnity in connection with a proceeding (or part thereof) initiated by such person only if (a) such indemnification is expressly required to be made by law, (b) the proceeding (or part thereof) was authorized by the Board of Directors of the corporation, (c) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the Delaware General Corporation Law, or (d) the proceeding (or part thereof) is brought to establish or enforce a right to indemnification under an indemnity agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law. The rights hereunder shall be contract rights and shall include the right to be paid expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, unless the Delaware General Corporation Law then so prohibits, the payment of such expenses incurred by a director or officer of the corporation in his or her capacity as a director or officer (and not in any other capacity in which service was or is tendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of such proceeding, shall be made only upon delivery to the corporation of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it should be determined ultimately that such director or officer is not entitled to be indemnified under this Section or otherwise.

7.2 Right of Claimant to Bring Suit. If a claim under Section 7.1 is not paid in full by the corporation within 90 days after a written claim has been received by the corporation, the claimant may at any time thereafter bring suit against the corporation to recover the unpaid amount of the claim and, if such suit is not frivolous or brought in bad faith, the claimant shall be entitled to be paid also the expense of prosecuting such claim. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending any proceeding in advance of its final disposition where the required undertaking, if any, has been tendered to this corporation) that the claimant has not met the standards of conduct which make it permissible under the Delaware General Corporation Law for the corporation to indemnify the claimant for the amount claimed. Neither the failure of the corporation (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he or she has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct.

7.3 Indemnification of Employees and Agents. The corporation may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification, and to the advancement of related expenses, to any employee or agent of the corporation to the fullest extent of the provisions of this Article with respect to the indemnification of and advancement of expenses to directors and officers of the corporation.

7.4 Non-Exclusivity of Rights. The rights conferred on any person in Sections 7.1 and 7.2 shall not be exclusive of any other right which such persons may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

7.5 Indemnification Contracts. The Board of Directors is authorized to enter into a contract with any director, officer, employee or agent of the corporation, or any person serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing for indemnification rights equivalent to or, if the Board of Directors so determines, greater than, those provided for in this Article VII.

7.6 Insurance. The corporation may maintain insurance to the extent reasonably available, at its expense, to protect itself and any such director, officer, employee or agent of the corporation or another corporation, partnership, joint venture, trust or other enterprise against any such expense, liability or loss, whether or not the corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

7.7 Effect of Amendment. Any amendment, repeal or modification of any provision of this Article VII by the stockholders and the directors of the corporation shall not adversely affect any right or protection of a director or officer of the corporation existing at the time of such amendment, repeal or modification.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

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AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "Agreement"), is made as of September 30, 2020 by and among Olema Pharmaceuticals, Inc., a Delaware corporation (the "Company"), each of the investors listed on Schedule A hereto (the "Series C Investors"), each holder of the Company's Series A Preferred Stock, \$0.0001 par value per share ("Series A Preferred Stock"), each holder of the Company's Series A-1 Preferred Stock, \$0.0001 par value per share ("Series A-1 Preferred Stock") and each holder of the Company's Series B Preferred Stock, \$0.0001 par value per share (the "Series B Preferred Stock"), listed on Schedule B (the "Prior Investors") and together with the Series C Investors, the "Investors") and each of the stockholders listed on Schedule C hereto, each of whom is referred to herein as a "Key Holder".

RECITALS

A. The Company, the Key Holders and the Prior Investors previously entered into an Amended and Restated Investor Rights Agreement, dated March 17, 2020 (as amended, the "Prior Agreement"), in connection with the purchase of shares of Series B Preferred Stock.

B. The Key Holders, the Prior Investors and the Company desire to induce certain of the Investors to purchase shares of Series C Preferred Stock of the Company, par value \$0.0001 per share ("Series C Preferred Stock"), pursuant to that certain Series C Preferred Stock Purchase Agreement dated as of the date hereof by and among the Company and such Investors (the "Purchase Agreement") by amending and restating the Prior Agreement, which governs the rights of the Investors and Key Holders to cause the Company to register shares of Common Stock, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement

AGREEMENT

The parties agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "Affiliate" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, managing member, officer, director or trustee of such Person, or any venture capital fund, or other investment fund now or hereafter existing that is controlled by one or more general partners, managing members or investment adviser of, or shares the same management company or investment adviser with, such Person.

1.2 "Certificate of Incorporation" means the Company's Fifth Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.3 "Common Stock" means shares of the Company's common stock, par value \$0.0001 per share.

1.4 "Competitor" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the development of small molecule drugs that target the estrogen receptor, but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than 20% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the Board of Directors of any Competitor.

1.5 “Damages” means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law or other federal securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law or other federal securities law.

1.6 “Derivative Securities” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.7 “Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.8 “Excluded Registration” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.9 “Form S-1” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.10 “Form S-3” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.11 “GAAP” means generally accepted accounting principles in the United States.

1.12 “Holder” means any holder of Registrable Securities who is a party to this Agreement.

1.13 “Immediate Family Member” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.14 “Initiating Holders” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.15 “IPO” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

- 1.16 “Key Employee” means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).
- 1.17 “Liquidation Transaction” shall have the meaning set forth in the Certificate of Incorporation.
- 1.18 “Major Investor” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 500,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).
- 1.19 “New Securities” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.
- 1.20 “Person” means any individual, corporation, partnership, trust, limited liability company, association or other entity.
- 1.21 “Preferred Stock” means, collectively, shares of the Company’s Series A Preferred Stock, Series A-1 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.
- 1.22 “Purchase Agreement” shall have the meaning set forth in the recitals.
- 1.23 “Qualified Merger” shall have the meaning set forth in the Certificate of Incorporation.
- 1.24 “Registrable Securities” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof; and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.
- 1.25 “Registrable Securities then outstanding” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.
- 1.26 “Restricted Securities” means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.
- 1.27 “SEC” means the Securities and Exchange Commission.
- 1.28 “SEC Rule 144” means Rule 144 promulgated by the SEC under the Securities Act.

1.29 “SEC Rule 145” means Rule 145 promulgated by the SEC under the Securities Act.

1.30 “Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.31 “Selling Expenses” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.32 “Series A Preferred Stock” shall have the meaning set forth in the preamble.

1.33 “Series A-1 Preferred Stock” shall have the meaning set forth in the preamble.

1.34 “Series B Preferred Stock” shall have the meaning set forth in the preamble.

1.35 “Series C Preferred Stock” shall have the meaning set forth in the recitals.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five years after the date of this Agreement or (ii) 180 days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of 30% of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to Registrable Securities with an anticipated aggregate offering price, net of Selling Expenses, of not less than \$10,000,000, then the Company shall (x) within ten days after the date such request is given, give notice thereof (the “Demand Notice”) to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within 60 days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within 20 days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least 30% of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$2,000,000, then the Company shall (i) within ten days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within 45 days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within 20 days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than 60 days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any 12-month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such 60-day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a), (i) during the period that is 60 days before the Company's good faith estimate of the date of filing of, and ending on a date that is 180 days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is 30 days before the Company's good faith estimate of the date of filing of, and ending on a date that is 90 days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the 12-month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d); provided, however, that if such withdrawal is during a period the Company has deferred taking action pursuant to Subsection 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Subsection 2.1(d); provided, further, however, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business, or prospects of the Company not known to the Holders at the time of their request for such registration and have withdrawn their request for registration with reasonable promptness after learning of such material adverse change, then such withdrawn registration statement shall not be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within 20 days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by a majority in interest of the Initiating Holders and shall be reasonably acceptable to the Company. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(d)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below 30% of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as “effected” if, as a result of an exercise of the underwriter’s cutback provisions in Subsection 2.3(a), fewer than 50% of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to 120 days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that such 120-day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$50,000, of one counsel for the selling Holders ("Selling Holder Counsel"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, managers, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after 90 days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would allow such holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter (in connection with an IPO) or the Company (in connection with a Qualified Merger), during the period commencing on the date of (a) the final prospectus relating to the IPO or (b) the consummation of a Qualified Merger, as applicable, and ending on the date specified by the Company and/or the managing underwriter, as applicable (such period not to exceed 180 days, (i) lend; 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; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for the IPO or consummation of the Qualified Merger, as applicable, or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO or a Qualified Merger, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if: (1) all officers and directors are subject to the same restrictions, (2) the Company obtains a similar agreement from all stockholders individually owning 1% or more of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock), and (3) with respect to the Qualified Merger, all securities of the surviving or parent entity in the Qualified Merger held by the sponsor and each founder of the special purpose acquisition company involved in such Qualified Merger are subject to lock-up restrictions no less restrictive than those contained in this Subsection 2.11. The underwriters of the IPO are intended third party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters (in connection with an IPO) or by the Company (in connection with a Qualified Merger) that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. The foregoing provisions of this Subsection 2.11 shall not apply to transactions (including any swap, hedge, derivative or other synthetic arrangement) or announcements relating to securities acquired (A) in the IPO or (B) in open market or other transactions from and after the IPO or consummation of the Qualified Merger, as applicable, or that otherwise do not involve or relate to securities of the Company held by a Holder immediately before the effective date of the registration statement for the IPO or consummation of the Qualified Merger and/or shares issued to Holder in connection with the Qualified Merger, as applicable. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company, the underwriters or the surviving or parent entity of the Qualified Merger shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Liquidation Transaction;

(b) such time after consummation of the IPO or Qualified Merger as SEC Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares during a three-month period without registration (and without the requirement for the Company to be in compliance with the current public information required under subsection (c)(1) of SEC Rule 144); and

(c) the third anniversary of the IPO.

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver, upon request (i) to each Major Investor and each Key Holder, the information set forth in Subsections 3.1(a)-(f), and (ii) to each Investor holding fewer than 500,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof), the information set forth in Subsections 3.1(a) and (b):

(a) as soon as practicable, but in any event within 90 days after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, all prepared in accordance with GAAP, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Subsection 3.1(d)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event 30 days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "Budget"), approved by the Board of Directors and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(e) with respect to the financial statements called for in Subsection 3.1(a) and Subsection 3.1(b), an instrument executed by the chief financial officer and chief executive officer of the Company certifying that such financial statements were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (except as otherwise set forth in Subsection 3.1(b)) and fairly present the financial condition of the Company and its results of operation for the periods specified therein; and

(f) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date 30 days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor, at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Subsection 3.1 and Subsection 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or a Qualified Merger, or (ii) upon a Liquidation Transaction, provided that the proceeds distributable to the Company's stockholders are cash and/or marketable securities, whichever event occurs first.

3.4 Confidentiality. Each Investor and Key Holder agrees that such party will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement or intent to effect a Qualified Merger), unless such confidential information (x) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.4 by such Investor or Key Holder), (y) is or has been independently developed or conceived by the party without use of the Company's confidential information, or (z) is or has been made known or disclosed to such party by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that such party may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such party, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.4; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such party in the ordinary course of business, provided that such party informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information or such Person is otherwise bound by a confidentiality obligation to such party; (iv) to the extent required in connection with any routine or periodic examination or similar process by any regulatory or self-regulatory body or authority not specifically directed at the Company or the confidential information obtained from the Company pursuant to the terms of this Agreement, including, without limitation, quarterly or annual reports; or (v) as may otherwise be required by law, provided that, in the case of this clause (v), such party promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

(a) The Company understands and acknowledges that in the regular course of the business of Citadel Multi-Strategy Equities Master Fund Ltd. ("Surveyor") and its Affiliates will invest in companies that have issued securities that are publicly traded (each, a "Public Company" and together, "Public Companies"). Accordingly, the Company covenants and agrees that it shall not provide any material non-public information about a Public Company to Surveyor or any representative of Surveyor. In addition, the Company acknowledges and agrees that in no event shall Surveyor's confidentiality and non-use obligations hereunder in any manner be deemed or construed as limiting Surveyor or its representatives' (or any of their respective Affiliates) ability to trade any security of a Public Company.

(b) The Company understands and acknowledges that in the regular course of the business OLM Pharma Holdings Limited (“OLMPH”) and its Affiliates will invest in Public Companies. Accordingly, the Company covenants and agrees that it shall not provide any material non-public information about a Public Company to OLMPH or any representative of OLMPH. In addition, the Company acknowledges and agrees that in no event shall OLMPH’s confidentiality and non-use obligations hereunder in any manner be deemed or construed as limiting OLMPH or its representatives’ (or any of their respective Affiliates) ability to trade any security of a Public Company.

(c) The Company understands and acknowledges that in the regular course of the business Deerfield Partners, L.P. (“Deerfield”) and its Affiliates will invest in Public Companies. Accordingly, the Company covenants and agrees that it shall not provide any material non-public information about a Public Company to Deerfield or any representative of Deerfield. In addition, the Company acknowledges and agrees that in no event shall Deerfield’s confidentiality and non-use obligations hereunder in any manner be deemed or construed as limiting Deerfield or its representatives’ (or any of their respective Affiliates) ability to trade any security of a Public Company.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself and (ii) its Affiliates.

(a) The Company shall give notice (the “Offer Notice”) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within 20 days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities that equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Major Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such 20-day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “Fully Exercising Investor”) of any other Major Investor’s failure to do likewise. During the ten-day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors that is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of 120 days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the 90-day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within 30 days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company's Certificate of Incorporation); and (ii) shares of Common Stock issued in the IPO.

(e) Notwithstanding any provision hereof to the contrary, if the Board of Directors determines in good faith that compliance with the provisions of this Subsection 4.1 would result in a delay that would cause material harm to the Company, in lieu of complying with the provisions of this Subsection 4.1, the Company may elect to give notice to the Major Investors within ten days prior to the issuance of New Securities. Such notice shall describe the type, price, and terms of the New Securities. Each Major Investor shall have 20 days from the date notice is given to elect to purchase up to the number of New Securities that would, if purchased by such Major Investor, maintain such Major Investor's percentage-ownership position, calculated as set forth in Subsection 4.1(b) before giving effect to the issuance of such New Securities. The closing of such sale shall occur within 60 days of the date notice is given to the Major Investors.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or a Qualified Merger, or (ii) upon a Liquidation Transaction, provided that the proceeds to the Company's stockholders are cash and/or marketable securities, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall maintain Directors and Officers liability insurance from financially sound and reputable insurers in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued.

5.2 Employee Agreements. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four-year period, with 25% of such shares vesting following 12 months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following 36 months, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. Without the prior approval of the Board of Directors of the Company, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Subsection 5.3. In addition, unless otherwise approved by the Board of Directors of the Company, the Company shall retain (and not waive) any "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock issued after the date hereof.

5.4 Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause any shares of Preferred Stock that, on the original date of issuance thereof, constituted “qualified small business stock” as defined in Section 1202(c) of the Internal Revenue Code of 1986, as amended (the “Code”), as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Code, to continue to so qualify; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) holding such “qualified small business stock” and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within 20 business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

5.5 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the nonemployee directors and observers for all reasonable out-of-pocket travel expenses incurred (consistent with the Company’s travel policy) in connection with attending meetings of the Board of Directors.

5.6 Matters Requiring Investor Director Approval. So long as the holders of Series B Preferred Stock and/or Series C Preferred Stock are entitled to elect the Preferred Directors (as defined in that certain Voting Agreement dated as of the date hereof by and among the Company and certain stockholders of the Company), the Company hereby covenants and agrees with each of the Investors that it shall not appoint a new Chief Executive Officer without the approval of (i) the Preferred Director designated by Biotechnology Value Fund, LP, if any, (ii) the Preferred Director designated by Logos Global Management LP, if any, and (iii) Janus Henderson Global Life Sciences Fund (for so long as Janus (as defined below) holds any Registrable Securities) or the board observer appointed by Janus as provided in Subsection 5.7.

5.7 Observer Rights. The Company shall invite (i) one representative of Janus Henderson Global Life Sciences Fund or an Affiliate (“Janus”) thereof, (ii) one representative of Vivo Opportunity Fund, L.P. (“Vivo”) and (iii) one representative of the Key Holders, who initially shall be Peter Kushner (each, a “Board Observer,” and together, the “Board Observers”), to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give the Board Observers copies of all notices, minutes, consents and other materials that it provides to its directors; provided, however, that each of the Board Observers shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and, provided further, that the Company reserves the right to withhold any information and to exclude any of the Board Observers from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney client privilege between the Company and its counsel or would result in disclosure of trade secrets to any of the Board Observers or if such Investor or its representative is a Competitor of the Company; provided, however, neither Janus nor Vivo shall be deemed a Competitor. The Company shall reimburse the Janus Board Observer and the Vivo Board Observer for all reasonable out-of-pocket travel and lodging expenses incurred in connection with attending meetings of the Board of Directors.

5.8 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, its current Certificate of Incorporation, or elsewhere, as the case may be.

5.9 Indemnification Matters. The Company hereby acknowledges that one or more of the directors nominated to serve on the Board of Directors by the Investors (each an "Investor Director") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their Affiliates (collectively, the "Investor Indemnitors"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Investor Director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Investor Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Investor Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Investor Director to the extent legally permitted and as required by the Company's Certificate of Incorporation or Bylaws (or any agreement between the Company and such Investor Director), without regard to any rights such Investor Director may have against the Investor Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Investor Indemnitors from any and all claims against the Investor 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 Investor Indemnitors on behalf of any such Investor Director with respect to any claim for which such Investor Director has sought indemnification from the Company shall affect the foregoing and the Investor 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 such Investor Director against the Company. The Investor Directors and the Investor Indemnitors are intended third-party beneficiaries of this Subsection 5.9 and shall have the right, power and authority to enforce the provisions of this Subsection 5.9 as though they were a party to this Agreement.

5.10 FCPA. The Company covenants that it shall not (and shall not permit any of its subsidiaries or Affiliates or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any Non-U.S. Official (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA")), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further covenants that it shall (and shall cause each of its subsidiaries and Affiliates to) cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or Affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further covenants that it shall (and shall cause each of its subsidiaries and Affiliates to) develop and thereafter maintain systems of internal controls (including, but not limited to, accounting systems, purchasing systems and billing systems) that are designed to ensure compliance with the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. Upon reasonable request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws. The Company shall promptly notify each Investor if the Company becomes aware of any Enforcement Action (as defined in the Purchase Agreement). The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA in all material respects. The Company shall use its best efforts to cause any direct or indirect subsidiary, whether now in existence or formed in the future, to comply in all material respects with all applicable laws.

5.11 Publicity. Without the prior written consent of OLMPH, the Company shall not use, publish, reproduce, or refer to OLMPH, its Affiliates and/or controlling persons or any similar name, trademark or logo in any non-internal discussion, documents or materials, including without limitation for marketing, advertising and publicity purposes.

5.12 Termination of Covenants. The covenants set forth in this Section 5, except for Subsections 5.8 and 5.9, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or a Qualified Merger or (ii) upon a Liquidation Transaction, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate, partner, member, manager, limited partner, retired partner, retired member, or stockholder of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 500,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

6.3 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A, Schedule B or Schedule C (as applicable) hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5.

Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "DGCL"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number set forth below such Investor's or Key Holder's name on the Schedules hereto, as updated from time to time by notice to the Company, or as on the books of the Company. Each Investor and Key Holder agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

6.6 Amendments and Waivers. Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c), shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing: (a) this Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor or Major Investor, as applicable, without the written consent of such Investor or Major Investor, as applicable, unless such amendment, modification, termination, or waiver applies to all Investors or Major Investors, as applicable, in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Major Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Major Investors may nonetheless, by agreement with the Company, purchase securities in such transaction); (b) Subsections 3.1 and 3.2, Section 4 and any other section of this Agreement applicable to the Major Investors (including this clause (b) of this Subsection 6.6) may not be amended, modified, terminate or waived without the written consent of the holders of a majority of the Registrable Securities then outstanding and held by the Major Investors, provided, however, that in the case of a waiver of Section 4 with respect to a transaction or financing, if any Major Investor, individually or together with such Major Investor's Affiliates, participates in any such transaction or financing, then each other Major Investor will be offered the opportunity to participate on the same basis (although proportionate to their respective holdings of Registrable Securities); (c) Subsection 5.6 may not be amended, modified, terminated or waived without the written consent of holders of a majority of shares of Series B Preferred Stock (voting as a single class and on an as-converted to Common Stock basis); (d) Subsection 5.7 and this clause (d) of this Subsection 6.6 may not be amended, modified, terminated or waived without the written consent of Janus if such amendment, modification, termination or waiver applies to Janus (for so long as it holds shares of Preferred Stock) or Vivo if such amendment, modification, termination or waiver applies to Vivo (for long as it holds shares of Preferred Stock); and (e) Subsection 3.4(a) and this clause (e) of this Subsection 6.6 may not be amended, modified, terminated or waived without the written consent of Surveyor if such amendment, modification, termination or waiver applies to Surveyor (for so long as it holds shares of Preferred Stock); (f) Subsection 3.4(b), Subsection 5.11 and this clause (f) of this Subsection 6.6 may not be amended, modified, terminated or waived without the written consent of OLMPH if such amendment, modification, termination or waiver applies to OLMPH (for so long as it holds shares of Preferred Stock); and (g) Subsection 3.4(c) and this clause (g) of this Subsection 6.6 may not be amended, modified, terminated or waived without the written consent of Deerfield if such amendment, modification, termination or waiver applies to Deerfield (for so long as it holds shares of Preferred Stock). Further, this Agreement may not be amended, modified or terminated, and no provision hereof may be waived, in each case, in any way that would adversely affect the rights of the Key Holders hereunder in a manner disproportionate to any adverse effect such amendment, modification, termination or waiver would have on the rights of the Investors hereunder, without also the written consent of the holders of a majority of the Registrable Securities held by the Key Holders. Notwithstanding the foregoing, Schedule A and Schedule B hereto may be amended by the Company from time to time to add transferees of any Registrable Securities in compliance with the terms of this Agreement without the consent of the other parties. The Company shall give prompt notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination, or waiver. Any amendment, modification, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Entire Agreement. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated to read in its entirety as set forth in this Agreement. This Agreement (including any Schedules hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of California and to the jurisdiction of the United States District Court for the Northern District of California for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of California or the United States District Court for the Northern District of California, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the District of Northern California or any court of the State of California having subject matter jurisdiction.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.12 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises that may have products or services that compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services that compete with those of the Company. The Company hereby agrees that, to the extent permitted under applicable law, the Investors shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by an Investor in any entity competitive with the Company, or (ii) actions taken by any partner, officer, employee or other representative of an Investor to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

[Signature pages follow]

The parties have executed this Agreement as of the date first written above.

COMPANY:

OLEMA PHARMACEUTICALS, INC.

By: /s/ Shane Kovacs

Shane Kovacs

Chief Financial Officer

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

KEY HOLDERS:

/s/ Peter Kushner

Peter Kushner

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

KEY HOLDERS:

/s/ Cyrus Harmon

Cyrus Harmon

Harmon Family Investors, LLC

By: /s/ Cyrus Harmon

Cyrus Harmon

Manager

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

KEY HOLDERS:

/s/ David Myles

David Myles

Myles Properties Inc.

By: /s/ David Myles

David Myles

President

The Myles Family Revocable Inter Vivos Trust, Trustee:

David C Myles

By: /s/ David Myles

David Myles

Trustee

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

VIVO OPPORTUNITY FUND, L.P.

By: Vivo Opportunity, LLC
Its General Partner

By: /s/ Albert Cha
Albert Cha
Managing Member

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

AVORO LIFE SCIENCES FUND LLC

By: /s/ Scott Epstein

Name: Scott Epstein

Title: Partner, Chief Financial Officer, & Chief Compliance Officer

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

BLACKROCK HEALTH SCIENCES TRUST II

By: BlackRock Advisors, LLC,
its Investment Advisor

By: /s/ Hongying Erin Xie

Name: Hongying Erin Xie

Title: Managing Director

BLACKROCK HEALTH SCIENCES MASTER UNIT TRUST

By: BlackRock Capital Management, Inc,
its Investment Advisor

By: /s/ Hongying Erin Xie

Name: Hongying Erin Xie

Title: Managing Director

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

DEERFIELD PARTNERS, L.P.

By: Deerfield Mgmt, L.P.
General Partner

By: J.E. Flynn Capital, LLC
General Partner

By: /s/ David J. Clark

Name: David J. Clark

Title: Authorized Signatory

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

ORBIMED GENESIS MASTER FUND, L.P.

By: OrbiMed Genesis GP LLC,
its General Partner

By: OrbiMed Advisors LLC,
its Managing Member

By: /s/ Geoffrey Hsu

Name: Geoffrey Hsu

Title: Member

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

OLM PHARMA HOLDINGS LIMITED

By: /s/ Colm O'Connell

Name: Colm O'Connell

Title: Authorized Signatory

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

OM CO-INVESTMENT LLC

By: /s/ Owen Littman

Name: Owen Littman

Title: Authorized Signatory

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

BIOTECHNOLOGY VALUE FUND, L.P.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: Chief Executive Officer BVF I GP LLC, itself
General Partner of Biotechnology Value Fund, L.P.

BIOTECHNOLOGY VALUE FUND II, L.P.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: Chief Executive Officer BVF II GP LLC,
itself General Partner of Biotechnology Value Fund II, L.P.

BIOTECHNOLOGY VALUE TRADING FUND OS, L.P.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: President BVF Inc.
General Partner of BVF Partners L.P., itself
Sole member of BVF Partners OS Ltd., itself
GP of Biotechnology Value Trading Fund OS, L.P.

MSI BVF SPV, L.L.C.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: President BVF Inc.
General Partner of BVF Partners L.P., itself
attorney-in-fact for MSI BVF SPV, L.L.C.

INVESTMENT 10, LLC

By: /s/ Mark Lampert
Name: Mark Lampert
Title: President BVF Inc.
General Partner of BVF Partners L.P., itself
investment advisor of Investment 10, LLC

The parties have executed this Agreement as of the date first written above.

INVESTORS:

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its General Partner

By: /s/ Rajeev Shah
Name: Rajeev Shah
Title: Manager

RA CAPITAL NEXUS FUND, L.P.

By: RA Capital Nexus Fund GP, LLC
Its General Partner

By: /s/ Rajeev Shah
Name: Rajeev Shah
Title: Manager

BLACKWELL PARTNERS LLC – SERIES A

By: /s/ Abayomi A. Adigun
Name: Abayomi A. Adigun
Title: Investment Manager, DUMAC, Inc., Authorized Agent

By: /s/ Anil Madhok
Name: Anil Madhok
Title: Chief Operating Officer, DUMAC, Inc., Authorized Agent

The parties have executed this Agreement as of the date first written above.

INVESTORS:

CITADEL MULTI-STRATEGY EQUITIES MASTER FUND LTD.

By: Citadel Advisors LLC, its portfolio manager

By: /s/ Christopher L. Ramsay

Name: Christopher L. Ramsay

Title: Authorized Signatory

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP

By: Cormorant Global Healthcare GP, LLC

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member of the GP

CORMORANT PRIVATE HEALTHCARE FUND II, LP

By: Cormorant Private Healthcare GP II, LLC

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member of the GP

CORMORANT PRIVATE HEALTHCARE FUND III, LP

By: Cormorant Private Healthcare GP III, LLC

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member of the GP

CRMA SPV, L.P.

By: Cormorant Asset Management, LLC

Its: Attorney-In-Fact

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

FORESITE CAPITAL FUND IV, L.P.

By: Foresite Capital Management IV, LLC
Its: General Partner

By: /s/ Dennis D. Ryan
Name: Dennis D. Ryan
Title: Chief Financial Officer

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

JANUS HENDERSON HORIZON FUND – BIOTECHNOLOGY FUND

By: /s/ Andrew Acker
Andrew Acker
Portfolio Manager and Authorized Signatory

**JANUS HENDERSON CAPITAL FUNDS PLC ON BEHALF OF ITS SERIES
JANUS HENDERSON GLOBAL LIFE SCIENCES FUND**

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Andrew Acker
Authorized Signatory

JANUS HENDERSON GLOBAL LIFE SCIENCES FUND

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Andrew Acker
Authorized Signatory

JANUS HENDERSON BIOTECH INNOVATION MASTER FUND LIMITED

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Andrew Acker
Authorized Signatory

The parties have executed this Agreement as of the date first written above.

INVESTORS:

LOGOS OPPORTUNITIES FUND II, L.P.

By: Logos Opportunities GP, LLC
Its General Partner

By: /s/ Arsani William

Name: Arsani William

Title: Managing Partner

LOGOS OPPORTUNITIES FUND I, L.P.

By: Logos Opportunities GP, LLC
Its General Partner

By: /s/ Arsani William

Name: Arsani William

Title: Managing Partner

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

VENROCK HEALTHCARE CAPITAL PARTNERS EG, L.P.

By: VHCP Management EG, LLC, its general partner

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

VENROCK HEALTHCARE CAPITAL PARTNERS III, L.P.

By: VHCP Management III, LLC, its general partner

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

VHCP CO-INVESTMENT HOLDINGS III, LLC

By: VHCP Management III, LLC, its manager

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

**WELLINGTON BIOMEDICAL INNOVATION MASTER INVESTORS
(CAYMAN) I L.P.**

By: Wellington Management Company LLP, as investment advisor

By: /s/ Peter McIsaac

Name: Peter McIsaac

Title: Managing Director & Counsel

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

/s/ Peter Kushner
Peter Kushner

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

/s/ Cyrus Harmon
Cyrus Harmon

Harmon Family Investors, LLC

By: /s/ Cyrus Harmon
Cyrus Harmon
Manager

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

/s/ David Myles
David Myles

Myles Properties Inc.

By: /s/ David Myles
David Myles
President

The Myles Family Revocable Inter Vivos Trust, Trustee: David C Myles

By: /s/ David Myles
David Myles
Trustee

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

The parties have executed this Agreement as of the date first written above.

INVESTORS:

SPW INVESTMENTS, LLC

By: /s/ Andy Rappaport
Andy Rappaport
Manager

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

SCHEDULE A

Series C Investors

SCHEDULE B

Prior Investors

SCHEDULE C

Key Holders

OLEMA PHARMACEUTICALS, INC.
2014 STOCK PLAN

1. ESTABLISHMENT, PURPOSE AND TERM OF PLAN.

1.1 **Establishment.** Olema Pharmaceuticals, Inc. 2014 Stock Plan (the “**Plan**”) is hereby established effective as of December 24, 2014 (the “**Effective Date**”).

1.2 **Purpose.** The purpose of the Plan is to advance the interests of the Company and its stockholders by providing an incentive to attract, retain and reward persons performing services for the Company and by motivating such persons to contribute to the growth and profitability of the Company. The Company intends that securities issued pursuant to the Plan be exempt from requirements of registration and qualification of such securities pursuant the exemptions afforded by Rule 701 promulgated under the Securities Act and any other applicable exemptions, and the Plan shall be so construed. Further, the Company intends that Awards granted pursuant to the Plan be exempt from or comply with Section 409A of the Code (including any amendments or replacements of such section), and the Plan shall be so construed.

1.3 **Term of Plan.** The Plan shall continue in effect until its termination by the Board; provided, however, that all Awards shall be granted, if at all, within ten (10) years from the earlier of the date the Plan is adopted by the Board or the date the Plan is duly approved by the stockholders of the Company.

2. DEFINITIONS AND CONSTRUCTION.

2.1 **Definitions.** Whenever used herein, the following terms shall have their respective meanings set forth below:

(a) “**Award**” means an Option, Restricted Stock Purchase Right or Restricted Stock Bonus granted under the Plan.

(b) “**Award Agreement**” means a written or electronic agreement between the Company and a Participant setting forth the terms, conditions and restrictions of the Award granted to the Participant.

(c) “**Board**” means the Board of Directors of the Company. If one or more Committees have been appointed by the Board to administer the Plan, “**Board**” also means such Committee(s).

(d) “**Cause**” means, unless such term or an equivalent term is otherwise defined by the applicable Award Agreement or other written agreement between a Participant and the Company applicable to an Award, any of the following: (i) the Participant’s theft, dishonesty, willful misconduct, breach of fiduciary duty for personal profit, or falsification of the Company documents or records; (ii) the Participant’s material failure to abide by the Company’s code of conduct or other policies (including, without limitation, policies relating to confidentiality and reasonable workplace conduct); (iii) the Participant’s unauthorized use, misappropriation, destruction or diversion of any tangible or intangible asset or corporate opportunity of the Company (including, without limitation, the Participant’s improper use or disclosure of the Company’s confidential or proprietary information); (iv) any intentional act by the Participant which has a material detrimental effect on the Company’s reputation or business; (v) the Participant’s repeated failure or inability to perform any reasonable assigned duties after written notice from the Company of, and a reasonable opportunity to cure, such failure or inability; (vi) any material breach by the Participant of any employment or service agreement between the Participant and the Company, which breach is not cured pursuant to the terms of such agreement; or (vii) the Participant’s conviction (including any plea of guilty or nolo contendere) of any criminal act involving fraud, dishonesty, misappropriation or moral turpitude, or which impairs the Participant’s ability to perform his or her duties with the Company.

(e) “**Change in Control**” means, unless such term or an equivalent term is otherwise defined by the applicable Award Agreement or other written agreement between the Participant and the Company applicable to an Award, the occurrence of any of the following:

(i) an Ownership Change Event or a series of related Ownership Change Events (collectively, a “**Transaction**”) in which the stockholders of the Company immediately before the Transaction do not retain immediately after the Transaction direct or indirect beneficial ownership of more than fifty percent (50%) of the total combined voting power of the outstanding securities entitled to vote generally in the election of Directors or, in the case of an Ownership Change Event described in Section 2.1(u)(iii), the entity to which the assets of the Company were transferred (the “**Transferee**”), as the case may be; or

(ii) approval by the stockholders of a plan of complete liquidation or dissolution of the Company;

provided, however, that a Change in Control shall be deemed not to include a transaction described in subsections (i) of this Section 2.1(e) in which a majority of the members of the board of directors of the continuing, surviving or successor entity, or parent thereof, immediately after such transaction is comprised of Incumbent Directors.

For purposes of the preceding sentence, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company or the Transferee, as the case may be, either directly or through one or more subsidiary corporations or other business entities. The Board shall have the right to determine whether multiple sales or exchanges of the voting securities of the Company or multiple Ownership Change Events are related, and its determination shall be final, binding and conclusive.

(f) “**Code**” means the Internal Revenue Code of 1986, as amended, and any applicable regulations and administrative guidelines promulgated thereunder.

(g) “**Committee**” means the compensation committee or other committee or subcommittee of the Board duly appointed to administer the Plan and having such powers as shall be specified by the Board. Unless the powers of the Committee have been specifically limited, the Committee shall have all of the powers of the Board granted herein, including, without limitation, the power to amend or terminate the Plan at any time, subject to the terms of the Plan and any applicable limitations imposed by law.

(h) “**Company**” means Olema Pharmaceuticals, Inc., a Delaware corporation, or any successor corporation thereto.

(i) “**Consultant**” means a person engaged to provide consulting or advisory services (other than as an Employee or a Director) to the Company, provided that the identity of such person, the nature of such services or the entity to which such services are provided would not preclude the Company from offering or selling securities to such person pursuant to the Plan in reliance on either the exemption from registration provided by Rule 701 under the Securities Act or, if the Company is required to file reports pursuant to Section 13 or 15(d) of the Exchange Act, registration on a Form S-8 Registration Statement under the Securities Act.

(j) “**Director**” means a member of the Board.

(k) “**Disability**” means the inability of the Participant, in the opinion of a qualified physician acceptable to the Company, to perform the major duties of the Participant’s position with the Company because of the sickness or injury of the Participant.

(l) “**Employee**” means any person treated as an employee (including an Officer or a Director who is also treated as an employee) in the records of the Company and, with respect to any Incentive Stock Option granted to such person, who is an employee for purposes of Section 422 of the Code; provided, however, that neither service as a Director nor payment of a director’s fee shall be sufficient to constitute employment for purposes of the Plan. The Company shall determine in good faith and in the exercise of its discretion whether an individual has become or has ceased to be an Employee and the effective date of such individual’s employment or termination of employment, as the case may be. For purposes of an individual’s rights, if any, under the terms of the Plan as of the time of the Company’s determination of whether or not the individual is an Employee, all such determinations by the Company shall be final, binding and conclusive as to such rights, if any, notwithstanding that the Company or any court of law or governmental agency subsequently makes a contrary determination as to such individual’s status as an Employee.

(m) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(n) “**Fair Market Value**” means, as of any date, the value of a share of Stock or other property as determined by the Board, in its discretion, or by the Company, in its discretion, if such determination is expressly allocated to the Company herein, subject to the following:

(i) If, on such date, the Stock is listed or quoted on a national or regional securities exchange or quotation system, the Fair Market Value of a share of Stock shall be the closing price of a share of Stock as quoted on the national or regional securities exchange or quotation system constituting the primary market for the Stock, as reported in The Wall Street Journal or such other source as the Company deems reliable. If the relevant date does not fall on a day on which the Stock has traded on such securities exchange or quotation system, the date on which the Fair Market Value shall be established shall be the last day on which the Stock was so traded or quoted prior to the relevant date, or such other appropriate day as shall be determined by the Board, in its discretion.

(ii) If, on such date, the Stock is not listed or quoted on a national or regional securities exchange or quotation system, the Fair Market Value of a share of Stock shall be as determined by the Board in good faith without regard to any restriction other than a restriction which, by its terms, will never lapse, and in a manner consistent with the requirements of Section 409A of the Code.

(o) “**Incentive Stock Option**” means an Option intended to be (as set forth in the Award Agreement) and which qualifies as an incentive stock option within the meaning of Section 422(b) of the Code.

(p) “**Incumbent Director**” means a director who either (i) is a member of the Board as of the Effective Date or (ii) is elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but excluding a director who was elected or nominated in connection with an actual or threatened proxy contest relating to the election of directors of the Company).

(q) “**Insider**” means an Officer, a Director or other person whose transactions in Stock are subject to Section 16 of the Exchange Act.

(r) “**Nonstatutory Stock Option**” means an Option not intended to be (as set forth in the Award Agreement) or which does not qualify as an incentive stock option within the meaning of Section 422(b) of the Code.

(s) “**Officer**” means any person designated by the Board as an officer of the Company.

(t) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option granted pursuant to the Plan.

(u) “**Ownership Change Event**” means the occurrence of any of the following with respect to the Company: (i) the direct or indirect sale or exchange in a single or series of related transactions by the stockholders of the Company of securities of the Company representing more than fifty percent (50%) of the total combined voting power of the Company’s then-outstanding securities entitled to vote generally in the election of Directors; (ii) a merger or consolidation in which the Company is a party; or (iii) the sale, exchange, or transfer of all or substantially all of the assets of the Company (other than a sale, exchange or transfer to one or more subsidiaries of the Company).

(v) “**Participant**” means any eligible person who has been granted one or more Awards.

(w) “**Restricted Stock Award**” means an Award of a Restricted Stock Bonus or a Restricted Stock Purchase Right.

- (x) “**Restricted Stock Bonus**” means Stock granted to a Participant pursuant to Section 7.
- (y) “**Restricted Stock Purchase Right**” means a right to purchase Stock granted to a Participant pursuant to Section 7.
- (z) “**Rule 16b-3**” means Rule 16b-3 under the Exchange Act, as amended from time to time, or any successor rule or regulation.
- (aa) “**Securities Act**” means the Securities Act of 1933, as amended.

(bb) “**Service**” means a Participant’s employment or service with the Company, whether as an Employee, a Director or a Consultant.

Unless otherwise provided by the Board, a Participant’s Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant renders such Service or a change in the Company for which the Participant renders such Service, provided that there is no interruption or termination of the Participant’s Service. Furthermore, a Participant’s Service shall not be deemed to have been interrupted or terminated if the Participant takes any military leave, sick leave, or other bona fide leave of absence approved by the Company. However, unless otherwise provided by the Board, if any such leave taken by a Participant exceeds ninety (90) days, then on the ninety-first (91st) day following the commencement of such leave the Participant’s Service shall be deemed to have terminated, unless the Participant’s right to return to Service is guaranteed by statute or contract. Notwithstanding the foregoing, unless otherwise designated by the Company or required by law, an unpaid leave of absence shall not be treated as Service for purposes of determining vesting under the Participant’s Award Agreement. A Participant’s Service shall be deemed to have terminated either upon an actual termination of Service or upon the business entity for which the Participant performs Service ceasing to be the Company. Subject to the foregoing, the Company, in its discretion, shall determine whether the Participant’s Service has terminated and the effective date of and reason for such termination.

(cc) “**Stock**” means the non-voting common stock of the Company, as adjusted from time to time in accordance with Section 4.3.

(dd) “**Subsidiary Corporation**” means any present or future “subsidiary corporation” of the Company, as defined in Section 424(f) of the Code.

(ee) “**Ten Percent Stockholder**” means a person who, at the time an Award is granted to such person, owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company within the meaning of Section 422(b)(6) of the Code.

(ff) “**Trading Compliance Policy**” means the written policy of the Company pertaining to the purchase, sale, transfer or other disposition of the Company’s equity securities by Directors, Officers, Employees or other service providers who may possess material, nonpublic information regarding the Company or its securities.

(gg) “**Vesting Conditions**” mean those conditions established in accordance with the Plan prior to the satisfaction of which shares subject to an Award remain subject to forfeiture or a repurchase option in favor of the Company exercisable for the Participant’s monetary purchase price, if any, for such shares upon the Participant’s termination of Service.

2.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of the Plan. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term “or” is not intended to be exclusive, unless the context clearly requires otherwise.

3. **ADMINISTRATION.**

3.1 **Administration by the Board.** The Plan shall be administered by the Board. All questions of interpretation of the Plan, of any Award Agreement or of any other form of agreement or other document employed by the Company in the administration of the Plan or of any Award shall be determined by the Board, and such determinations shall be final, binding and conclusive upon all persons having an interest in the Plan or such Award, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Board in the exercise of its discretion pursuant to the Plan or Award Agreement or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest therein. All expenses incurred in connection in the administration of the Plan shall be paid by the Company.

3.2 **Authority of Officers.** Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, determination or election which is the responsibility of or which is allocated to the Company herein, provided the Officer has apparent authority with respect to such matter, right, obligation, determination or election.

3.3 **Powers of the Board.** In addition to any other powers set forth in the Plan and subject to the provisions of the Plan, the Board shall have the full and final power and authority, in its discretion:

- subject to each Award;
- (a) to determine the persons to whom, and the time or times at which, Awards shall be granted and the number of shares of Stock to be subject to each Award;
 - (b) to determine the type of Award granted;
 - (c) to determine the Fair Market Value of shares of Stock or other property;
 - (d) to determine the terms, conditions and restrictions applicable to each Award (which need not be identical) and any shares acquired pursuant thereto, including, without limitation, (i) the exercise or purchase price of shares pursuant to any Award, (ii) the method of payment for shares purchased pursuant to any Award, (iii) the method for satisfaction of any tax withholding obligation arising in connection with any Award, including by the withholding or delivery of shares of Stock, (iv) the timing, terms and conditions of the exercisability or vesting of any Award or any shares acquired pursuant thereto, (v) the time of expiration of any Award, (vi) the effect of any Participant’s termination of Service on any of the foregoing, and (vii) all other terms, conditions and restrictions applicable to any Award or shares acquired pursuant thereto not inconsistent with the terms of the Plan;
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(e) to approve one or more forms of Award Agreement;

(f) to amend, modify, extend, cancel or renew any Award or to waive any restrictions or conditions applicable to any Award or any shares acquired pursuant thereto;

(g) to reprice or otherwise adjust the exercise price of any Option, or to grant in substitution for any Option a new Award covering the same or different number of shares of Stock;

(h) to accelerate, continue, extend or defer the exercisability or vesting of any Award or any shares acquired pursuant thereto, including with respect to the period following a Participant's termination of Service;

(i) to prescribe, amend or rescind rules, guidelines and policies relating to the Plan, or to adopt sub-plans or supplements to, or alternative versions of, the Plan, including, without limitation, as the Board deems necessary or desirable to comply with the laws of, or to accommodate the tax policy, accounting principles or custom of, foreign jurisdictions whose citizens may be granted Awards; and

(j) to correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award Agreement and to make all other determinations and take such other actions with respect to the Plan or any Award as the Board may deem advisable to the extent not inconsistent with the provisions of the Plan or applicable law.

3.4 **Administration with Respect to Insiders.** With respect to participation by Insiders in the Plan, at any time that any class of equity security of the Company is registered pursuant to Section 12 of the Exchange Act, the Plan shall be administered in compliance with the requirements, if any, of Rule 16b-3.

3.5 **Indemnification.** In addition to such other rights of indemnification as they may have as members of the Board or as officers or employees of the Company, members of the Board and any officers or employees of the Company to whom authority to act for the Board or the Company is delegated shall be indemnified by the Company against all reasonable expenses, including attorneys' fees, actually and necessarily incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan, or any right granted hereunder, and against all amounts paid by them in settlement thereof (provided such settlement is approved by independent legal counsel selected by the Company) or paid by them in satisfaction of a judgment in any such action, suit or proceeding, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such person is liable for gross negligence, bad faith or intentional misconduct in duties; provided, however, that within sixty (60) days after the institution of such action, suit or proceeding, such person shall offer to the Company, in writing, the opportunity at its own expense to handle and defend the same.

4. SHARES SUBJECT TO PLAN.

4.1 **Maximum Number of Shares Issuable.** Subject to adjustment as provided in Sections 4.2 and 4.3, the maximum aggregate number of shares of Stock that may be issued under the Plan shall be thirteen million five hundred thousand (13,500,000) and shall consist of authorized but unissued or reacquired shares of Stock or any combination thereof.

4.2 **Share Counting.** If an outstanding Award for any reason expires or is terminated or canceled without having been exercised or settled in full, or if shares of Stock are acquired pursuant to an Award subject to forfeiture or repurchase and are forfeited or repurchased by the Company for an amount not greater than the Participant's exercise or purchase price, the shares of Stock allocable to the terminated portion of such Award or such forfeited or repurchased shares of Stock shall again be available for issuance under the Plan. Shares of Stock shall not be deemed to have been issued pursuant to the Plan (a) with respect to any portion of an Award that is settled in cash or (b) to the extent such shares are withheld or reacquired by the Company in satisfaction of tax withholding obligations pursuant to Section 10.2. If the exercise price of an Option is paid by tender to the Company, or attestation to the ownership, of shares of Stock owned by the Participant, or by means of a Net Exercise, the number of shares available for issuance under the Plan shall be reduced by the net number of shares issued upon the exercise of the Option.

4.3 **Adjustments for Changes in Capital Structure.** Subject to any required action by the stockholders of the Company and the requirements of Sections 409A and 424 of the Code to the extent applicable, in the event of any change in the Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Stock (excepting regular, periodic cash dividends) that has a material effect on the Fair Market Value of shares of Stock, appropriate and proportionate adjustments shall be made in the number and kind of shares subject to the Plan and to any outstanding Awards, in the ISO Share Limit set forth in Section 5.3(a), and in the exercise or purchase price per share under any outstanding Awards in order to prevent dilution or enlargement of Participants' rights under the Plan. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "effected without receipt of consideration by the Company." If a majority of the shares which are of the same class as the shares that are subject to outstanding Awards are exchanged for, converted into, or otherwise become (whether or not pursuant to an Ownership Change Event) shares of another corporation (the "**New Shares**"), the Board may unilaterally amend the outstanding Awards to provide that such Awards are for New Shares. In the event of any such amendment, the number of shares subject to, and the exercise or purchase price per share of, the outstanding Awards shall be adjusted in a fair and equitable manner as determined by the Board, in its discretion. Any fractional share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number, and the exercise or purchase price per share shall be rounded up to the nearest whole cent. In no event may the exercise or purchase price, if any, under any Award be decreased to an amount less than the par value, if any, of the stock subject to the Award. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

4.4 **Assumption or Substitution of Awards.** The Board may, without affecting the number of shares of Stock available pursuant to Section 4.1, authorize the issuance or assumption of benefits under this Plan in connection with any merger, consolidation, acquisition of property or stock, or reorganization upon such terms and conditions as it may deem appropriate, subject to compliance with Section 409A and any other applicable provisions of the Code.

5. **ELIGIBILITY, PARTICIPATION AND OPTION LIMITATIONS.**

5.1 **Persons Eligible for Awards.** Awards may be granted only to Employees, Consultants and Directors.

5.2 **Participation in the Plan.** Awards are granted solely at the discretion of the Board. Eligible persons may be granted more than one Award. However, eligibility in accordance with this Section shall not entitle any person to be granted an Award, or, having been granted an Award, to be granted an additional Award.

5.3 **Incentive Stock Option Limitations.**

(a) **Maximum Number of Shares Issuable Pursuant to Incentive Stock Options.** Subject to Section 4.1 and adjustment as provided in Sections 4.2 and 4.3, the maximum aggregate number of shares of Stock that may be issued under the Plan pursuant to the exercise of Incentive Stock Options shall not exceed thirty-four million five hundred thousand (34,500,000) shares (the "**ISO Share Limit**"). The maximum aggregate number of shares of Stock that may be issued under the Plan pursuant to all Awards other than Incentive Stock Options shall be the number of shares determined in accordance with Section 4.1, subject to adjustment as provided in Sections 4.2 and 4.3.

(b) **Persons Eligible.** An Incentive Stock Option may be granted only to a person who, on the effective date of grant, is an Employee. Any person who is not an Employee on the effective date of the grant of an Option to such person may be granted only a Nonstatutory Stock Option.

(c) **Fair Market Value Limitation.** To the extent that options designated as Incentive Stock Options (granted under all stock plans of the Company, including the Plan) become exercisable by a Participant for the first time during any calendar year for stock having a Fair Market Value greater than One Hundred Thousand Dollars (\$100,000), the portions of such options which exceed such amount shall be treated as Nonstatutory Stock Options. For purposes of this Section, options designated as Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of stock shall be determined as of the time the option with respect to such stock is granted. If the Code is amended to provide for a limitation different from that set forth in this Section, such different limitation shall be deemed incorporated herein effective as of the date and with respect to such Options as required or permitted by such amendment to the Code. If an Option is treated as an Incentive Stock Option in part and as a Nonstatutory Stock Option in part by reason of the limitation set forth in this Section, the Participant may designate which portion of such Option the Participant is exercising. In the absence of such designation, the Participant shall be deemed to have exercised the Incentive Stock Option portion of the Option first. Upon exercise of the Option, Shares issued pursuant to each such portion shall be separately identified.

6. **STOCK OPTIONS.**

Options shall be evidenced by Award Agreements specifying the number of shares of Stock covered thereby, in such form as the Board shall from time to time establish. Such Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

6.1 **Exercise Price.** The exercise price for each Option shall be established in the discretion of the Board; provided, however, that (a) the exercise price per share for an Option shall be not less than the Fair Market Value of a share of Stock on the effective date of grant of the Option and (b) no Incentive Stock Option granted to a Ten Percent Stockholder shall have an exercise price per share less than one hundred ten percent (110%) of the Fair Market Value of a share of Stock on the effective date of grant of the Option. Notwithstanding the foregoing, an Option (whether an Incentive Stock Option or a Nonstatutory Stock Option) may be granted with an exercise price lower than the minimum exercise price set forth above if such Option is granted pursuant to an assumption or substitution for another option in a manner qualifying under the provisions of Section 409A or Section 424(a) of the Code, as applicable.

6.2 **Exercisability and Term of Options.** Options shall be exercisable at such time or times, or upon such event or events, and subject to such terms, conditions, performance criteria and restrictions as shall be determined by the Board and set forth in the Award Agreement evidencing such Option; provided, however, that (a) no Option shall be exercisable after the expiration of ten (10) years after the effective date of grant of such Option, (b) no Incentive Stock Option granted to a Ten Percent Stockholder shall be exercisable after the expiration of five (5) years after the effective date of grant of such Option, and (c) no Option granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable until at least six (6) months following the date of grant of such Option (except in the event of such Employee's death, disability or retirement, upon a Change in Control, or as otherwise permitted by the Worker Economic Opportunity Act). Subject to the foregoing, unless otherwise specified by the Board in the grant of an Option, each Option shall terminate ten (10) years after the effective date of grant of the Option, unless earlier terminated in accordance with its provisions.

6.3 **Payment of Exercise Price.**

(a) **Forms of Consideration Authorized.** Except as otherwise provided below, payment of the exercise price for the number of shares of Stock being purchased pursuant to any Option shall be made (i) in cash, by check or in cash equivalent, (ii) if permitted by the Company and subject to the limitations contained in Section 6.3(b), by means of (1) a Stock Tender Exercise, (2) a Cashless Exercise or (3) a Net Exercise; (iii) by such other consideration as may be approved by the Board from time to time to the extent permitted by applicable law, or (iv) by any combination thereof. The Board may at any time or from time to time grant Options which do not permit all of the foregoing forms of consideration to be used in payment of the exercise price or which otherwise restrict one or more forms of consideration.

(b) **Limitations on Forms of Consideration.**

(i) **Stock Tender Exercise.** A “*Stock Tender Exercise*” means the delivery of a properly executed exercise notice accompanied by a Participant’s tender to the Company, or attestation to the ownership, in a form acceptable to the Company of whole shares of Stock having a Fair Market Value that does not exceed the aggregate exercise price for the shares with respect to which the Option is exercised. A Stock Tender Exercise shall not be permitted if it would constitute a violation of the provisions of any law, regulation or agreement restricting the redemption of the Company’s stock. If required by the Company, the Option may not be exercised by tender to the Company, or attestation to the ownership, of shares of Stock unless such shares either have been owned by the Participant for a period of time required by the Company (and not used for another option exercise by attestation during such period) or were not acquired, directly or indirectly, from the Company.

(ii) **Cashless Exercise.** A Cashless Exercise shall be permitted only upon the class of shares subject to the Option becoming publicly traded in an established securities market. A “*Cashless Exercise*” means the delivery of a properly executed exercise notice together with irrevocable instructions to a broker providing for the assignment to the Company of the proceeds of a sale or loan with respect to some or all of the shares being acquired upon the exercise of the Option (including, without limitation, through an exercise complying with the provisions of Regulation T as promulgated from time to time by the Board of Governors of the Federal Reserve System). The Company reserves, at any and all times, the right, in the Company’s sole and absolute discretion, to establish, decline to approve or terminate any program or procedures for the exercise of Options by means of a Cashless Exercise, including with respect to one or more Participants specified by the Company notwithstanding that such program or procedures may be available to other Participants.

(iii) **Net Exercise.** A “*Net Exercise*” means the delivery of a properly executed exercise notice followed by a procedure pursuant to which (1) the Company will reduce the number of shares otherwise issuable to a Participant upon the exercise of an Option by the largest whole number of shares having a Fair Market Value that does not exceed the aggregate exercise price for the shares with respect to which the Option is exercised, and (2) the Participant shall pay to the Company in cash the remaining balance of such aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued.

6.4 **Effect of Termination of Service.**

(a) **Option Exercisability.** Subject to earlier termination of the Option as otherwise provided by this Plan and unless a longer exercise period is provided by the Board, an Option shall terminate immediately upon the Participant’s termination of Service to the extent that it is then unvested and shall be exercisable after the Participant’s termination of Service to the extent it is then vested only during the applicable time period determined in accordance with this Section and thereafter shall terminate:

(i) **Disability.** If the Participant’s Service terminates because of the Disability of the Participant, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant’s Service terminated, may be exercised by the Participant (or the Participant’s guardian or legal representative) at any time prior to the expiration of twelve (12) months after the date on which the Participant’s Service terminated, but in any event no later than the date of expiration of the Option’s term as set forth in the Award Agreement evidencing such Option (the “*Option Expiration Date*”).

(ii) **Death.** If the Participant's Service terminates because of the death of the Participant, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant's Service terminated, may be exercised by the Participant's legal representative or other person who acquired the right to exercise the Option by reason of the Participant's death at any time prior to the expiration of twelve (12) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date. The Participant's Service shall be deemed to have terminated on account of death if the Participant dies within three (3) months after the Participant's termination of Service.

(iii) **Termination for Cause.** Notwithstanding any other provision of the Plan to the contrary, if the Participant's Service is terminated for Cause, the Option shall terminate in its entirety and cease to be exercisable immediately upon such termination of Service.

(iv) **Other Termination of Service.** If the Participant's Service terminates for any reason, except Disability, death or Cause, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant's Service terminated, may be exercised by the Participant at any time prior to the expiration of three (3) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

(b) **Extension if Exercise Prevented by Law.** Notwithstanding the foregoing other than termination of Service for Cause, if the exercise of an Option within the applicable time periods set forth in Section 6.4(a) is prevented by the provisions of Section 11 below, the Option shall remain exercisable until the later of (i) thirty (30) days after the date such exercise first would no longer be prevented by such provisions or (ii) the end of the applicable time period under Section 6.4(a), but in any event no later than the Option Expiration Date.

6.5 **Transferability of Options.** During the lifetime of the Participant, an Option shall be exercisable only by the Participant or the Participant's guardian or legal representative. An Option shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. Notwithstanding the foregoing, to the extent permitted by the Board, in its discretion, and set forth in the Award Agreement evidencing such Option, an Option shall be assignable or transferable subject to the applicable limitations, if any, described in Rule 701 under the Securities Act and the General Instructions to Form S-8 Registration Statement under the Securities Act or, in the case of an Incentive Stock Option, only as permitted by applicable regulations under Section 421 of the Code in a manner that does not disqualify such Option as an Incentive Stock Option.

7. **RESTRICTED STOCK AWARDS.**

Restricted Stock Awards shall be evidenced by Award Agreements specifying whether the Award is a Restricted Stock Bonus or a Restricted Stock Purchase Right and the number of shares of Stock subject to the Award, in such form as the Board shall from time to time establish. Such Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

7.1 **Types of Restricted Stock Awards Authorized.** Restricted Stock Awards may be granted in the form of either a Restricted Stock Bonus or a Restricted Stock Purchase Right. Restricted Stock Awards may be granted upon such conditions as the Board shall determine, including, without limitation, upon the attainment of one or more performance goals.

7.2 **Purchase Price.** The purchase price for shares of Stock issuable under each Restricted Stock Purchase Right shall be established by the Board in its discretion. No monetary payment (other than applicable tax withholding) shall be required as a condition of receiving shares of Stock pursuant to a Restricted Stock Bonus, the consideration for which shall be services actually rendered to the Company or for its benefit. Notwithstanding the foregoing, if required by applicable state corporate law, the Participant shall furnish consideration in the form of cash or past services rendered to the Company or for its benefit having a value not less than the par value of the shares of Stock subject to a Restricted Stock Award.

7.3 **Purchase Period.** A Restricted Stock Purchase Right shall be exercisable within a period established by the Board, which shall in no event exceed thirty (30) days from the effective date of the grant of the Restricted Stock Purchase Right.

7.4 **Payment of Purchase Price.** Except as otherwise provided below, payment of the purchase price for the number of shares of Stock being purchased pursuant to any Restricted Stock Purchase Right shall be made (a) in cash, by check or in cash equivalent, (b) by such other consideration as may be approved by the Board from time to time to the extent permitted by applicable law, or (c) by any combination thereof.

7.5 **Vesting and Restrictions on Transfer.** Shares issued pursuant to any Restricted Stock Award may (but need not) be made subject to Vesting Conditions based upon the satisfaction of such Service requirements, conditions, restrictions or performance criteria, as shall be established by the Board and set forth in the Award Agreement evidencing such Award. During any period in which shares acquired pursuant to a Restricted Stock Award remain subject to Vesting Conditions, such shares may not be sold, exchanged, transferred, pledged, assigned or otherwise disposed of other than pursuant to an Ownership Change Event or as provided in Section 7.8. The Board, in its discretion, may provide in any Award Agreement evidencing a Restricted Stock Award that, if the satisfaction of Vesting Conditions with respect to any shares subject to such Restricted Stock Award would otherwise occur on a day on which the sale of such shares would violate the provisions of the Trading Compliance Policy, then satisfaction of the Vesting Conditions automatically shall be determined on the next trading day on which the sale of such shares would not violate the Trading Compliance Policy. Upon request by the Company, each Participant shall execute any agreement evidencing such transfer restrictions prior to the receipt of shares of Stock hereunder and shall promptly present to the Company any and all certificates representing shares of Stock acquired hereunder for the placement on such certificates of appropriate legends evidencing any such transfer restrictions.

7.6 **Voting Rights; Dividends and Distributions.** Except as provided in this Section, Section 7.5 and any Award Agreement, during any period in which shares acquired pursuant to a Restricted Stock Award remain subject to Vesting Conditions, the Participant shall have all of the rights of a stockholder of the Company holding shares of Stock, including the right to vote such shares and to receive all dividends and other distributions paid with respect to such shares; provided, however, that if so determined by the Board and provided by the Award Agreement, such dividends and distributions shall be subject to the same Vesting Conditions as the shares subject to the Restricted Stock Award with respect to which such dividends or distributions were paid, and otherwise shall be paid no later than the end of the calendar year in which such dividends or distributions are paid to stockholders (or, if later, the 15th day of the third month following the date such dividends or distributions are paid to stockholders). In the event of a dividend or distribution paid in shares of Stock or other property or any other adjustment made upon a change in the capital structure of the Company as described in Section 4.3, any and all new, substituted or additional securities or other property (other than regular, periodic cash dividends) to which the Participant is entitled by reason of the Participant's Restricted Stock Award shall be immediately subject to the same Vesting Conditions as the shares subject to the Restricted Stock Award with respect to which such dividends or distributions were paid or adjustments were made.

7.7 **Effect of Termination of Service.** Unless otherwise provided by the Board in the Award Agreement evidencing a Restricted Stock Award, if a Participant's Service terminates for any reason, whether voluntary or involuntary (including the Participant's death or disability), then (a) the Company shall have the option to repurchase for the purchase price paid by the Participant any shares acquired by the Participant pursuant to a Restricted Stock Purchase Right which remain subject to Vesting Conditions as of the date of the Participant's termination of Service and (b) the Participant shall forfeit to the Company any shares acquired by the Participant pursuant to a Restricted Stock Bonus which remain subject to Vesting Conditions as of the date of the Participant's termination of Service. The Company shall have the right to assign at any time any repurchase right it may have, whether or not such right is then exercisable, to one or more persons as may be selected by the Company.

7.8 **Nontransferability of Restricted Stock Award Rights.** Rights to acquire shares of Stock pursuant to a Restricted Stock Award shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or the laws of descent and distribution. All rights with respect to a Restricted Stock Award granted to a Participant hereunder shall be exercisable during his or her lifetime only by such Participant or the Participant's guardian or legal representative.

8. **STANDARD FORMS OF AWARD AGREEMENTS.**

8.1 **Award Agreements.** Each Award shall comply with and be subject to the terms and conditions set forth in the appropriate form of Award Agreement approved by the Board and as amended from time to time. No Award or purported Award shall be a valid and binding obligation of the Company unless evidenced by a fully executed Award Agreement, which execution may be evidenced by electronic means.

8.2 **Authority to Vary Terms.** The Board shall have the authority from time to time to vary the terms of any standard form of Award Agreement either in connection with the grant or amendment of an individual Award or in connection with the authorization of a new standard form or forms; provided, however, that the terms and conditions of any such new, revised or amended standard form or forms of Award Agreement are not inconsistent with the terms of the Plan.

9. **CHANGE IN CONTROL.**

9.1 **Effect of Change in Control on Awards.** Subject to the requirements and limitations of Section 409A of the Code, if applicable, the Board may provide for any one or more of the following:

(a) **Accelerated Vesting.** In its discretion, the Board may provide in the grant of any Award or at any other time may take such action as it deems appropriate to provide for acceleration of the exercisability and/or vesting in connection with a Change in Control of each or any outstanding Award or portion thereof and shares acquired pursuant thereto upon such conditions, including termination of the Participant's Service prior to, upon, or following such Change in Control, and to such extent as the Board shall determine.

(b) **Assumption, Continuation or Substitution of Awards.** In the event of a Change in Control, the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of any Participant, assume or continue the Company's rights and obligations under each or any Award or portion thereof outstanding immediately prior to the Change in Control or substitute for each or any such outstanding Award or portion thereof a substantially equivalent award with respect to the Acquiror's stock. For purposes of this Section, if so determined by the Board, in its discretion, an Award or any portion thereof shall be deemed assumed if, following the Change in Control, the Award confers the right to receive, subject to the terms and conditions of the Plan and the applicable Award Agreement, for each share of Stock subject to such portion of the Award immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a holder of a share of Stock on the effective date of the Change in Control was entitled (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Stock); provided, however, that if such consideration is not solely common stock of the Acquiror, the Board may, with the consent of the Acquiror, provide for the consideration to be received upon the exercise of the Award for each share of Stock to consist solely of common stock of the Acquiror equal in Fair Market Value to the per share consideration received by holders of Stock pursuant to the Change in Control. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable future payment of such consideration. Any Award or portion thereof which is neither assumed or continued by the Acquiror in connection with the Change in Control nor exercised as of the time of consummation of the Change in Control shall terminate and cease to be outstanding effective as of the time of consummation of the Change in Control. Notwithstanding the foregoing, shares acquired upon exercise of an Award prior to the Change in Control and any consideration received pursuant to the Change in Control with respect to such shares shall continue to be subject to all applicable provisions of the Award Agreement evidencing such Award except as otherwise provided in such Award Agreement.

(c) **Cash-Out of Outstanding Awards.** The Board may, in its discretion and without the consent of any Participant, determine that, upon the occurrence of a Change in Control, each or any Award or portion thereof outstanding immediately prior to the Change in Control and not previously exercised or settled shall be canceled in exchange for a payment with respect to each vested share (and each unvested share, if so determined by the Board) of Stock subject to such canceled Award in (i) cash, (ii) stock of the Company or of a corporation or other business entity a party to the Change in Control, or (iii) other property which, in any such case, shall be in an amount having a Fair Market Value equal to the Fair Market Value of the consideration to be paid per share of Stock in the Change in Control, reduced (but not below zero) by the exercise or purchase price per share, if any, under such Award. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its sole discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable amount of future payment of such consideration. In the event such determination is made by the Board, an Award having an exercise or purchase price per share equal to or greater than the Fair Market Value of the consideration to be paid per share of Stock in the Change in Control may be canceled without payment of consideration to the holder thereof. Payment pursuant to this Section (reduced by applicable withholding taxes, if any) shall be made to Participants in respect of the vested portions of their canceled Awards as soon as practicable following the date of the Change in Control and in respect of the unvested portions of their canceled Awards in accordance with the vesting schedules applicable to such Awards.

9.2 Federal Excise Tax Under Section 4999 of the Code.

(a) **Excess Parachute Payment.** If any acceleration of vesting pursuant to an Award and any other payment or benefit received or to be received by a Participant would subject the Participant to any excise tax pursuant to Section 4999 of the Code due to the characterization of such acceleration of vesting, payment or benefit as an "excess parachute payment" under Section 280G of the Code, then, provided such election would not subject the Participant to taxation under Section 409A of the Code, the Participant may elect, in his or her sole discretion, to reduce the amount of any acceleration of vesting called for under the Award in order to avoid such characterization.

(b) **Determination by Independent Accountants.** To aid the Participant in making any election called for under Section 9.2(a), no later than the date of the occurrence of any event that might reasonably be anticipated to result in an "excess parachute payment" to the Participant as described in Section 9.2(a), the Company shall request a determination in writing by independent public accountants selected by the Company (the "**Accountants**"). As soon as practicable thereafter, the Accountants shall determine and report to the Company and the Participant the amount of such acceleration of vesting, payments and benefits which would produce the greatest after-tax benefit to the Participant. For the purposes of such determination, the Accountants may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Participant shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make their required determination. The Company shall bear all fees and expenses the Accountants charge in connection with their services contemplated by this Section.

10. **TAX WITHHOLDING.**

10.1 **Tax Withholding in General.** The Company shall have the right to deduct from any and all payments made under the Plan, or to require the Participant, through payroll withholding, cash payment or otherwise, to make adequate provision for, the federal, state, local and foreign taxes (including any social insurance tax), if any, required by law to be withheld by the Company with respect to an Award or the shares acquired pursuant thereto. The Company shall have no obligation to deliver shares of Stock or to release shares of Stock from an escrow established pursuant to an Award Agreement until the Company's tax withholding obligations have been satisfied by the Participant.

10.2 **Withholding in or Directed Sale of Shares.** The Company shall have the right, but not the obligation, to deduct from the shares of Stock issuable to a Participant upon the exercise or vesting of an Award, or to accept from the Participant the tender of, a number of whole shares of Stock having a Fair Market Value, as determined by the Company, equal to all or any part of the tax withholding obligations of the Company. The Fair Market Value of any shares of Stock withheld or tendered to satisfy any such tax withholding obligations shall not exceed the amount determined by the applicable minimum statutory withholding rates. The Company may require a Participant to direct a broker, upon the vesting or exercise of an Award, to sell a portion of the shares subject to the Award determined by the Company in its discretion to be sufficient to cover the tax withholding obligations of the Company and to remit an amount equal to such tax withholding obligations to the Company in cash.

11. **COMPLIANCE WITH SECURITIES LAW.**

The grant of Awards and the issuance of shares of Stock pursuant to any Award shall be subject to compliance with all applicable requirements of federal, state and foreign law with respect to such securities and the requirements of any stock exchange or market system upon which the Stock may then be listed. In addition, no Award may be exercised or shares issued pursuant to an Award unless (a) a registration statement under the Securities Act shall at the time of such exercise or issuance be in effect with respect to the shares issuable pursuant to the Award or (b) in the opinion of legal counsel to the Company, the shares issuable pursuant to the Award may be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance and sale of any shares hereunder shall relieve the Company of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained. As a condition to issuance of any Stock, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

12. AMENDMENT OR TERMINATION OF PLAN.

The Board may amend, suspend or terminate the Plan at any time. However, without the approval of the Company's stockholders, there shall be (a) no increase in the maximum aggregate number of shares of Stock that may be issued under the Plan (except by operation of the provisions of Sections 4.2 and 4.3), (b) no change in the class of persons eligible to receive Incentive Stock Options, and (c) no other amendment of the Plan that would require approval of the Company's stockholders under any applicable law, regulation or rule, including the rules of any stock exchange or quotation system upon which the Stock may then be listed or quoted. No amendment, suspension or termination of the Plan shall affect any then outstanding Award unless expressly provided by the Board. Except as provided by the next sentence, no amendment, suspension or termination of the Plan may have a materially adverse effect on any then outstanding Award without the consent of the Participant. Notwithstanding any other provision of the Plan or any Award Agreement to the contrary, the Board may, in its sole and absolute discretion and without the consent of any Participant, amend the Plan or any Award Agreement, to take effect retroactively or otherwise, as it deems necessary or advisable for the purpose of conforming the Plan or such Award Agreement to any present or future law, regulation or rule applicable to the Plan, including, but not limited to, Section 409A of the Code.

13. MISCELLANEOUS PROVISIONS.

13.1 **Repurchase Rights.** Shares issued under the Plan may be subject to a right of first refusal, one or more repurchase options, or other conditions and restrictions as determined by the Board in its discretion at the time the Award is granted. The Company shall have the right to assign at any time any repurchase right it may have, whether or not such right is then exercisable, to one or more persons as may be selected by the Company. Upon request by the Company, each Participant shall execute any agreement evidencing such transfer restrictions prior to the receipt of shares of Stock hereunder and shall promptly present to the Company any and all certificates representing shares of Stock acquired hereunder for the placement on such certificates of appropriate legends evidencing any such transfer restrictions.

13.2 **Forfeiture Events.** The Board may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but shall not be limited to, termination of Service for Cause or any act by a Participant, whether before or after termination of Service, that would constitute Cause for termination of Service.

13.3 **Provision of Information.** At least annually, copies of the Company's balance sheet and income statement for the just completed fiscal year shall be made available to each Participant and purchaser of shares of Stock upon the exercise of an Award; provided, however, that this requirement shall not apply if all offers and sales of securities pursuant to the Plan comply with all applicable conditions of Rule 701 under the Securities Act. The Company shall not be required to provide such information to key persons whose duties in connection with the Company assure them access to equivalent information. The Company shall deliver to each Participant such disclosures as are required in accordance with Rule 701 under the Securities Act.

13.4 **Rights as Employee, Consultant or Director.** No person, even though eligible pursuant to Section 5, shall have a right to be selected as a Participant, or, having been so selected, to be selected again as a Participant. Nothing in the Plan or any Award granted under the Plan shall confer on any Participant a right to remain an Employee, Consultant or Director or interfere with or limit in any way any right of the Company to terminate the Participant's Service at any time. To the extent that an Employee of the Company other than the Company receives an Award under the Plan, that Award shall in no event be understood or interpreted to mean that the Company is the Employee's employer or that the Employee has an employment relationship with the Company.

13.5 **Rights as a Stockholder.** A Participant shall have no rights as a stockholder with respect to any shares covered by an Award until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such shares are issued, except as provided in Section 4.3 or another provision of the Plan.

13.6 **Delivery of Title to Shares.** Subject to any governing rules or regulations, the Company shall issue or cause to be issued the shares of Stock acquired pursuant to an Award and shall deliver such shares to or for the benefit of the Participant by means of one or more of the following: (a) by delivering to the Participant evidence of book entry shares of Stock credited to the account of the Participant, (b) by depositing such shares of Stock for the benefit of the Participant with any broker with which the Participant has an account relationship, or (c) by delivering such shares of Stock to the Participant in certificate form.

13.7 **Fractional Shares.** The Company shall not be required to issue fractional shares upon the exercise or settlement of any Award.

13.8 **Retirement and Welfare Plans.** Neither Awards made under this Plan nor shares of Stock or cash paid pursuant to such Awards may be included as "compensation" for purposes of computing the benefits payable to any Participant under the Company's retirement plans (both qualified and non-qualified) or welfare benefit plans unless such other plan expressly provides that such compensation shall be taken into account in computing a Participant's benefits.

13.9 **Severability.** If any one or more of the provisions (or any part thereof) of this Plan shall be held invalid, illegal or unenforceable in any respect, such provision shall be modified so as to make it valid, legal and enforceable, and the validity, legality and enforceability of the remaining provisions (or any part thereof) of the Plan shall not in any way be affected or impaired thereby.

13.10 **No Constraint on Corporate Action.** Nothing in this Plan shall be construed to: (a) limit, impair, or otherwise affect the Company's right or power to make adjustments, reclassifications, reorganizations, or changes of its capital or business structure, or to merge or consolidate, or dissolve, liquidate, sell, or transfer all or any part of its business or assets; or (b) limit the right or power of the Company to take any action which such entity deems to be necessary or appropriate.

13.11 **Choice of Law.** Except to the extent governed by applicable federal law, the validity, interpretation, construction and performance of the Plan and each Award Agreement shall be governed by the laws of the State of Delaware, without regard to its conflict of law rules.

13.12 **Stockholder Approval.** The Plan or any increase in the maximum aggregate number of shares of Stock issuable thereunder as provided in Section 4.1 (the “**Authorized Shares**”) shall be approved by a majority of the outstanding securities of the Company entitled to vote by the later of (a) a period beginning twelve (12) months before and ending twelve (12) months after the date of adoption thereof by the Board or (b) the first issuance of any security pursuant to the Plan. Awards granted prior to security holder approval of the Plan or in excess of the Authorized Shares previously approved by the security holders shall become exercisable no earlier than the date of security holder approval of the Plan or such increase in the Authorized Shares, as the case may be, and such Awards shall be rescinded if such security holder approval is not received in the manner described in the preceding sentence.

**OLEMA PHARMACEUTICALS, INC.
NOTICE OF GRANT OF STOCK OPTION**

The Participant has been granted an option (the “*Option*”) to purchase certain shares of Common Stock of Olema Pharmaceuticals, Inc., a Delaware corporation, pursuant to the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the “*Plan*”), as follows:

Participant: _____

Date of Grant: _____

Number of Option Shares: _____, subject to adjustment as provided by the Option Agreement.

Exercise Price: \$ _____

Initial Vesting Date: _____

Option Expiration Date: The date ten years after the Date of Grant

Tax Status of Option: _____ Stock Option

Vested Shares: Except as provided in the Stock Option Agreement, the number of Vested Shares (disregarding any resulting fractional share) as of any date is determined by multiplying the Number of Option Shares by the “*Vested Ratio*” determined as of such date as follows:

Vested Ratio

Prior to Initial Vesting Date

On Initial Vesting Date, provided the Participant’s Service has not terminated prior to such date

Plus

For each additional full month of the Participant’s continuous Service from Initial Vesting Date until the Vested Ratio equals 1/1, an additional

The Exercise Price represents an amount the Company believes to be no less than the fair market value of a share of Stock as of the Date of Grant, determined in good faith in compliance with the requirements of Section 409A of the Code. However, there is no guarantee that the Internal Revenue Service will agree with the Company’s determination. A subsequent IRS determination that the Exercise Price is less than such fair market value could result in adverse tax consequences to the Participant. By signing below, the Participant agrees that the Company, its directors, officers and shareholders shall not be held liable for any tax, penalty, interest or cost incurred by the Participant as a result of such determination by the IRS. The Participant is urged to consult with his or her own tax advisor regarding the tax consequences of the Option, including the application of Section 409A.

By their signatures below, the Company and the Participant agree that the Option is governed by this Grant Notice and by the provisions of the Plan and the Stock Option Agreement, both of which are attached to and made a part of this document. The Participant acknowledges receipt of copies of the Plan and the Stock Option Agreement, represents that the Participant has read and is familiar with their provisions, and hereby accepts the Option subject to all of their terms and conditions.

| | |
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| <p>OLEMA PHARMACEUTICALS, INC.</p> <p>By: _____</p> <p>Name: _____</p> <p>Title: _____</p> <p>Address: _____</p> <p>512 2nd Street, 4th Floor _____</p> <p>San Francisco, CA 94107 _____</p> | <p>PARTICIPANT</p> <p>_____</p> <p>[Participant]</p> <p>Address: _____</p> <p>_____</p> <p>_____</p> |
|--|--|

ATTACHMENTS: 2014 Stock Plan, as amended to the Date of Grant, Stock Option Agreement and Exercise Notice

THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

OLEMA PHARMACEUTICALS, INC.
STOCK OPTION AGREEMENT

Olema Pharmaceuticals, Inc., a Delaware corporation has granted to the Participant named in the *Notice of Grant of Stock Option* (the “**Grant Notice**”) to which this Stock Option Agreement (the “**Option Agreement**”) is attached an option (the “**Option**”) to purchase certain shares of Stock upon the terms and conditions set forth in the Grant Notice and this Option Agreement. The Option has been granted pursuant to and shall in all respects be subject to the terms and conditions of the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the “**Plan**”), as amended to the Date of Grant, the provisions of which are incorporated herein by reference. By signing the Grant Notice, the Participant: (a) acknowledges receipt of, and represents that the Participant has read and is familiar with, the Grant Notice, this Option Agreement and the Plan, (b) accepts the Option subject to all of the terms and conditions of the Grant Notice, this Option Agreement and the Plan, and (c) agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under the Grant Notice, this Option Agreement or the Plan.

1. **DEFINITIONS AND CONSTRUCTION.**

1.1 **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Grant Notice or the Plan.

1.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of this Option Agreement. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term “or” is not intended to be exclusive, unless the context clearly requires otherwise.

2. **TAX CONSEQUENCES.**

2.1 **Tax Status of Option.** This Option is intended to have the tax status designated in the Grant Notice.

(a) **Incentive Stock Option.** If the Grant Notice so designates, this Option is intended to be an Incentive Stock Option within the meaning of Section 422(b) of the Code, but the Company does not represent or warrant that this Option qualifies as such. The Participant should consult with the Participant’s own tax advisor regarding the tax effects of this 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.

(NOTE TO PARTICIPANT: If the Option is exercised more than three (3) months after the date on which you cease to be an Employee (other than by reason of your death or permanent and total disability as defined in Section 22(e)(3) of the Code), the Option will be treated as a Nonstatutory Stock Option and not as an Incentive Stock Option to the extent required by Section 422 of the Code.)

(b) **Nonstatutory Stock Option.** If the Grant Notice so designates, this Option is intended to be a Nonstatutory Stock Option and shall not be treated as an Incentive Stock Option within the meaning of Section 422(b) of the Code.

2.2 **ISO Fair Market Value Limitation.** If the Grant Notice designates this Option as an Incentive Stock Option, then to the extent that the Option (together with all Incentive Stock Options granted to the Participant under all stock option plans of the Company, including the Plan) becomes exercisable for the first time during any calendar year for shares having a Fair Market Value greater than One Hundred Thousand Dollars (\$100,000), the portion of such options which exceeds such amount will be treated as Nonstatutory Stock Options. For purposes of this Section, options designated as Incentive Stock Options are taken into account in the order in which they were granted, and the Fair Market Value of stock is determined as of the time the option with respect to such stock is granted. If the Code is amended to provide for a different limitation from that set forth in this Section, such different limitation shall be deemed incorporated herein effective as of the date required or permitted by such amendment to the Code. If the Option is treated as an Incentive Stock Option in part and as a Nonstatutory Stock Option in part by reason of the limitation set forth in this Section, the Participant may designate which portion of such Option the Participant is exercising. In the absence of such designation, the Participant shall be deemed to have exercised the Incentive Stock Option portion of the Option first. Separate certificates representing each such portion shall be issued upon the exercise of the Option.

(NOTE TO PARTICIPANT: If the aggregate Exercise Price of the Option (that is, the Exercise Price multiplied by the Number of Option Shares) plus the aggregate exercise price of any other Incentive Stock Options you hold (whether granted pursuant to the Plan or any other stock option plan of the Company) is greater than \$100,000, you should contact the Chief Financial Officer of the Company to ascertain whether the entire Option qualifies as an Incentive Stock Option.)

3. **ADMINISTRATION.**

All questions of interpretation concerning the Grant Notice, this Option Agreement, the Plan or any other form of agreement or other document employed by the Company in the administration of the Plan or the Option shall be determined by the Board. All such determinations by the Board shall be final, binding and conclusive upon all persons having an interest in the Option, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Board in the exercise of its discretion pursuant to the Plan or the Option or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest in the Option. Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, or election which is the responsibility of or which is allocated to the Company herein, provided the Officer has apparent authority with respect to such matter, right, obligation, or election.

4. **EXERCISE OF THE OPTION.**

4.1 **Right to Exercise.** Except as otherwise provided herein, the Option shall be exercisable on and after the Initial Vesting Date and prior to the termination of the Option (as provided in Section 6) in an amount not to exceed the number of Vested Shares less the number of shares previously acquired upon exercise of the Option, subject to the Company's repurchase rights set forth in Section 11. In no event shall the Option be exercisable for more shares than the Number of Option Shares, as adjusted pursuant to Section 9.

4.2 **Method of Exercise.** Exercise of the Option shall be by means of electronic or written notice (the "**Exercise Notice**") in a form authorized by the Company. An electronic Exercise Notice must be digitally signed or authenticated by the Participant in such manner as required by the notice and transmitted to the Company or an authorized representative of the Company (including a third-party administrator designated by the Company). In the event that the Participant is not authorized or is unable to provide an electronic Exercise Notice, the Option shall be exercised by a written Exercise Notice addressed to the Company, which shall be signed by the Participant and delivered in person, by certified or registered mail, return receipt requested, by confirmed facsimile transmission, or by such other means as the Company may permit, to the Company, or an authorized representative of the Company (including a third-party administrator designated by the Company). Each Exercise Notice, whether electronic or written, must state the Participant's election to exercise the Option, the number of whole shares of Stock for which the Option is being exercised and such other representations and agreements as to the Participant's investment intent with respect to such shares as may be required pursuant to the provisions of this Option Agreement. Further, each Exercise Notice must be received by the Company prior to the termination of the Option as set forth in Section 6 and must be accompanied by full payment of the aggregate Exercise Price for the number of shares of Stock being purchased. The Option shall be deemed to be exercised upon receipt by the Company of such electronic or written Exercise Notice and the aggregate Exercise Price.

4.3 **Payment of Exercise Price.**

(a) **Forms of Consideration Authorized.** Except as otherwise provided below, payment of the aggregate Exercise Price for the number of shares of Stock for which the Option is being exercised shall be made (i) in cash, by check or in cash equivalent, (ii) if permitted by the Company and subject to the limitations contained in Section 4.3(b), by means of (1) a Stock Tender Exercise, (2) a Cashless Exercise or (3) a Net-Exercise; or (iii) by any combination of the foregoing.

(b) **Limitations on Forms of Consideration.** The Company reserves, at any and all times, the right, in the Company's sole and absolute discretion, to establish, decline to approve or terminate any program or procedure providing for payment of the Exercise Price through any of the means described below, including with respect to the Participant notwithstanding that such program or procedures may be available to others.

(i) **Stock Tender Exercise.** A “*Stock Tender Exercise* “ means the delivery of a properly executed Exercise Notice accompanied by (1) the Participant’s tender to the Company, or attestation to the ownership, in a form acceptable to the Company of whole shares of Stock having a Fair Market Value that does not exceed the aggregate Exercise Price for the shares with respect to which the Option is exercised, and (2) the Participant’s payment to the Company in cash of the remaining balance of such aggregate Exercise Price not satisfied by such shares’ Fair Market Value. A Stock Tender Exercise shall not be permitted if it would constitute a violation of the provisions of any law, regulation or agreement restricting the redemption of the Company’s stock. If required by the Company, the Option may not be exercised by tender to the Company, or attestation to the ownership, of shares of Stock unless such shares either have been owned by the Participant for a period of time required by the Company (and not used for another option exercise by attestation during such period) or were not acquired, directly or indirectly, from the Company.

(ii) **Cashless Exercise.** A Cashless Exercise shall be permitted only upon the class of shares subject to the Option becoming publicly traded in an established securities market. A “*Cashless Exercise* “ means the delivery of a properly executed Exercise Notice together with irrevocable instructions to a broker in a form acceptable to the Company providing for the assignment to the Company of the proceeds of a sale or loan with respect to shares of Stock acquired upon the exercise of the Option in an amount not less than the aggregate Exercise Price for such shares (including, without limitation, through an exercise complying with the provisions of Regulation T as promulgated from time to time by the Board of Governors of the Federal Reserve System).

(iii) **Net-Exercise.** A “*Net-Exercise* “ means the delivery of a properly executed Exercise Notice electing a procedure pursuant to which (1) the Company will reduce the number of shares otherwise issuable to the Participant upon the exercise of the Option by the largest whole number of shares having a Fair Market Value that does not exceed the aggregate Exercise Price for the shares with respect to which the Option is exercised, and (2) the Participant shall pay to the Company in cash the remaining balance of such aggregate Exercise Price not satisfied by such reduction in the number of whole shares to be issued. Following a Net-Exercise, the number of shares remaining subject to the Option, if any, shall be reduced by the sum of (1) the net number of shares issued to the Participant upon such exercise, and (2) the number of shares deducted by the Company for payment of the aggregate Exercise Price.

4.4 **Tax Withholding.**

(a) **In General.** At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Participant hereby authorizes withholding from payroll and any other amounts payable to the Participant, and otherwise agrees to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax (including any social insurance) withholding obligations of the Company, if any, which arise in connection with the Option. The Company shall have no obligation to deliver shares of Stock until the tax withholding obligations of the Company have been satisfied by the Participant.

(b) **Withholding in or Directed Sale of Shares.** The Company shall have the right, but not the obligation, to require the Participant to satisfy all or any portion of the Company's tax withholding obligations upon exercise of the Option by deducting from the shares of Stock otherwise issuable to the Participant upon such exercise a number of whole shares having a fair market value, as determined by the Company as of the date of exercise, not in excess of the amount of such tax withholding obligations determined by the applicable minimum statutory withholding rates. The Company may require the Participant to direct a broker, upon the exercise of the Option, to sell a portion of the shares subject to the Option determined by the Company in its discretion to be sufficient to cover the tax withholding obligations of the Company and to remit an amount equal to such tax withholding obligations to the Company in cash.

4.5 **Beneficial Ownership of Shares; Certificate Registration.** The Participant hereby authorizes the Company, in its sole discretion, to deposit for the benefit of the Participant with any broker with which the Participant has an account relationship of which the Company has notice any or all shares acquired by the Participant pursuant to the exercise of the Option. Except as provided by the preceding sentence, a certificate for the shares as to which the Option is exercised shall be registered in the name of the Participant, or, if applicable, in the names of the heirs of the Participant.

4.6 **Restrictions on Grant of the Option and Issuance of Shares.** The grant of the Option and the issuance of shares of Stock upon exercise of the Option shall be subject to compliance with all applicable requirements of federal, state or foreign law with respect to such securities. The Option may not be exercised if the issuance of shares of Stock upon exercise would constitute a violation of any applicable federal, state or foreign securities laws or other law or regulations or the requirements of any stock exchange or market system upon which the Stock may then be listed. In addition, the Option may not be exercised unless (i) a registration statement under the Securities Act shall at the time of exercise of the Option be in effect with respect to the shares issuable upon exercise of the Option or (ii) in the opinion of legal counsel to the Company, the shares issuable upon exercise of the Option may be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. **THE PARTICIPANT IS CAUTIONED THAT THE OPTION MAY NOT BE EXERCISED UNLESS THE FOREGOING CONDITIONS ARE SATISFIED. ACCORDINGLY, THE PARTICIPANT MAY NOT BE ABLE TO EXERCISE THE OPTION WHEN DESIRED EVEN THOUGH THE OPTION IS VESTED.** The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance and sale of any shares subject to the Option shall relieve the Company of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained. As a condition to the exercise of the Option, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

4.7 **Fractional Shares.** The Company shall not be required to issue fractional shares upon the exercise of the Option.

5. **NONTRANSFERABILITY OF THE OPTION.**

During the lifetime of the Participant, the Option shall be exercisable only by the Participant or the Participant's guardian or legal representative. The Option shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. Following the death of the Participant, the Option, to the extent provided in Section 7, may be exercised by the Participant's legal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

6. **TERMINATION OF THE OPTION.**

The Option shall terminate and may no longer be exercised after the first to occur of (a) the close of business on the Option Expiration Date, (b) the close of business on the last date for exercising the Option following termination of the Participant's Service as described in Section 7, or (c) a Change in Control to the extent provided in Section 8.

7. **EFFECT OF TERMINATION OF SERVICE.**

7.1 **Option Exercisability.** The Option shall terminate immediately upon the Participant's termination of Service to the extent that it is then unvested and shall be exercisable after the Participant's termination of Service to the extent it is then vested only during the applicable time period as determined below and thereafter shall terminate.

(a) **Disability.** If the Participant's Service terminates because of the Disability of the Participant, the Option, to the extent unexercised and exercisable for Vested Shares on the date on which the Participant's Service terminated, may be exercised by the Participant (or the Participant's guardian or legal representative) at any time prior to the expiration of twelve (12) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

(b) **Death.** If the Participant's Service terminates because of the death of the Participant, the Option, to the extent unexercised and exercisable for Vested Shares on the date on which the Participant's Service terminated, may be exercised by the Participant's legal representative or other person who acquired the right to exercise the Option by reason of the Participant's death at any time prior to the expiration of twelve (12) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date. The Participant's Service shall be deemed to have terminated on account of death if the Participant dies within three (3) months after the Participant's termination of Service.

(c) **Termination for Cause.** Notwithstanding any other provision of this Option Agreement, if the Participant's Service is terminated for Cause, the Option shall terminate in its entirety and cease to be exercisable immediately upon such termination of Service.

(d) **Other Termination of Service.** If the Participant's Service terminates for any reason, except Disability, death or Cause, the Option, to the extent unexercised and exercisable for Vested Shares by the Participant on the date on which the Participant's Service terminated, may be exercised by the Participant at any time prior to the expiration of three (3) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

7.2 **Extension if Exercise Prevented by Law.** Notwithstanding the foregoing other than termination of the Participant's Service for Cause, if the exercise of the Option within the applicable time periods set forth in Section 7.1 is prevented by the provisions of Section 4.6, the Option shall remain exercisable until the later of (a) thirty (30) days after the date such exercise first would no longer be prevented by such provisions or (b) the end of the applicable time period under Section 7.1, but in any event no later than the Option Expiration Date.

8. **EFFECT OF CHANGE IN CONTROL.**

In the event of a Change in Control, except to the extent that the Board determines to settle the Option in accordance with Section 9.1(c) of the Plan, the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of the Participant, assume or continue in full force and effect the Company's rights and obligations under all or any portion of the Option or substitute for all or any portion of the Option a substantially equivalent option for the Acquiror's stock. For purposes of this Section, the Option or any portion thereof shall be deemed assumed if, following the Change in Control, the Option confers the right to receive, subject to the terms and conditions of the Plan and this Option Agreement, for each share of Stock subject to such portion of the Option immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a holder of a share of Stock on the effective date of the Change in Control was entitled (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Stock); provided, however, that if such consideration is not solely common stock of the Acquiror, the Board may, with the consent of the Acquiror, provide for the consideration to be received upon the exercise of the Option for each share of Stock to consist solely of common stock of the Acquiror equal in Fair Market Value to the per share consideration received by holders of Stock pursuant to the Change in Control. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable future payment of such consideration. The Option shall terminate and cease to be outstanding effective as of the time of consummation of the Change in Control to the extent that the Option is neither assumed or continued by the Acquiror in connection with the Change in Control nor exercised as of the time of the Change in Control. Notwithstanding the foregoing, shares acquired upon exercise of the Option prior to the Change in Control and any consideration received pursuant to the Change in Control with respect to such shares shall continue to be subject to all applicable provisions of this Option Agreement except as otherwise provided herein.

9. ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE.

Subject to any required action by the stockholders of the Company and the requirements of Sections 409A and 424 of the Code to the extent applicable, in the event of any change in the Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Stock (excepting normal cash dividends) that has a material effect on the Fair Market Value of shares of Stock, appropriate and proportionate adjustments shall be made in the number, Exercise Price and kind of shares subject to the Option, in order to prevent dilution or enlargement of the Participant's rights under the Option. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "**effected without receipt of consideration by the Company.**" Any fractional share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number, and the Exercise Price shall be rounded up to the nearest whole cent. In no event may the Exercise Price be decreased to an amount less than the par value, if any, of the stock subject to the Option. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

10. RIGHTS AS A STOCKHOLDER, DIRECTOR, EMPLOYEE OR CONSULTANT.

The Participant shall have no rights as a stockholder with respect to any shares covered by the Option until the date of the issuance of the shares for which the Option has been exercised (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date the shares are issued, except as provided in Section 9. If the Participant is an Employee, the Participant understands and acknowledges that, except as otherwise provided in a separate, written employment agreement between the Company and the Participant, the Participant's employment is "**at will**" and is for no specified term. Nothing in this Option Agreement shall confer upon the Participant any right to continue in the Service of the Company or interfere in any way with any right of the Company to terminate the Participant's Service as a Director, an Employee or Consultant, as the case may be, at any time.

11. RIGHT OF FIRST REFUSAL.

11.1 **Grant of Right of First Refusal.** Except as provided in Section 11.7 and Section 16 below, in the event the Participant, the Participant's legal representative, or other holder of shares acquired upon exercise of the Option proposes to sell, exchange, transfer, pledge, or otherwise dispose of any Vested Shares (the "**Transfer Shares**") to any person or entity, including, without limitation, any stockholder of the Company, the Company shall have the right to repurchase the Transfer Shares under the terms and subject to the conditions set forth in this Section 11 (the "**Right of First Refusal**").

11.2 **Notice of Proposed Transfer.** Prior to any proposed transfer of the Transfer Shares, the Participant shall deliver written notice (the "**Transfer Notice**") to the Company describing fully the proposed transfer, including the number of Transfer Shares, the name and address of the proposed transferee (the "**Proposed Transferee**") and, if the transfer is voluntary, the proposed transfer price, and containing such information necessary to show the bona fide nature of the proposed transfer. In the event of a bona fide gift or involuntary transfer, the proposed transfer price shall be deemed to be the Fair Market Value of the Transfer Shares, as determined by the Board in good faith. If the Participant proposes to transfer any Transfer Shares to more than one Proposed Transferee, the Participant shall provide a separate Transfer Notice for the proposed transfer to each Proposed Transferee. The Transfer Notice shall be signed by both the Participant and the Proposed Transferee and must constitute a binding commitment of the Participant and the Proposed Transferee for the transfer of the Transfer Shares to the Proposed Transferee subject only to the Right of First Refusal.

11.3 **Bona Fide Transfer.** If the Company determines that the information provided by the Participant in the Transfer Notice is insufficient to establish the bona fide nature of a proposed voluntary transfer, the Company shall give the Participant written notice of the Participant's failure to comply with the procedure described in this Section 11, and the Participant shall have no right to transfer the Transfer Shares without first complying with the procedure described in this Section 11. The Participant shall not be permitted to transfer the Transfer Shares if the proposed transfer is not bona fide.

11.4 **Exercise of Right of First Refusal.** If the Company determines the proposed transfer to be bona fide, the Company shall have the right to purchase all, but not less than all, of the Transfer Shares (except as the Company and the Participant otherwise agree) at the purchase price and on the terms set forth in the Transfer Notice by delivery to the Participant of a notice of exercise of the Right of First Refusal within thirty (30) days after the date the Transfer Notice is delivered to the Company. The Company's exercise or failure to exercise the Right of First Refusal with respect to any proposed transfer described in a Transfer Notice shall not affect the Company's right to exercise the Right of First Refusal with respect to any proposed transfer described in any other Transfer Notice, whether or not such other Transfer Notice is issued by the Participant or issued by a person other than the Participant with respect to a proposed transfer to the same Proposed Transferee. If the Company exercises the Right of First Refusal, the Company and the Participant shall thereupon consummate the sale of the Transfer Shares to the Company on the terms set forth in the Transfer Notice within sixty (60) days after the date the Transfer Notice is delivered to the Company (unless a longer period is offered by the Proposed Transferee); provided, however, that in the event the Transfer Notice provides for the payment for the Transfer Shares other than in cash, the Company shall have the option of paying for the Transfer Shares by the present value cash equivalent of the consideration described in the Transfer Notice as reasonably determined by the Company. For purposes of the foregoing, cancellation of any indebtedness of the Participant to the Company shall be treated as payment to the Participant in cash to the extent of the unpaid principal and any accrued interest canceled. Notwithstanding anything contained in this Section to the contrary, the period during which the Company may exercise the Right of First Refusal and consummate the purchase of the Transfer Shares from the Participant shall terminate no sooner than the completion of a period of eight (8) months following the date on which the Participant acquired the Transfer Shares upon exercise of the Option.

11.5 **Failure to Exercise Right of First Refusal.** If the Company fails to exercise the Right of First Refusal in full (or to such lesser extent as the Company and the Participant otherwise agree) within the period specified in Section 11.4 above, the Participant may conclude a transfer to the Proposed Transferee of the Transfer Shares on the terms and conditions described in the Transfer Notice, provided such transfer occurs not later than ninety (90) days following delivery to the Company of the Transfer Notice or, if applicable, following the end of the period described in the last sentence of Section 11.4. The Company shall have the right to demand further assurances from the Participant and the Proposed Transferee (in a form satisfactory to the Company) that the transfer of the Transfer Shares was actually carried out on the terms and conditions described in the Transfer Notice. No Transfer Shares shall be transferred on the books of the Company until the Company has received such assurances, if so demanded, and has approved the proposed transfer as bona fide. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by the Participant, shall again be subject to the Right of First Refusal and shall require compliance by the Participant with the procedure described in this Section 11.

11.6 **Transferees of Transfer Shares.** All transferees of the Transfer Shares or any interest therein, other than the Company, shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold such Transfer Shares or interest therein subject to all of the terms and conditions of this Option Agreement, including this Section 11 providing for the Right of First Refusal with respect to any subsequent transfer. Any sale or transfer of any shares acquired upon exercise of the Option shall be void unless the provisions of this Section 11 are met.

11.7 **Transfers Not Subject to Right of First Refusal.** The Right of First Refusal shall not apply to any transfer or exchange of the shares acquired upon exercise of the Option if such transfer or exchange is in connection with an Ownership Change Event. If the consideration received pursuant to such transfer or exchange consists of stock of the Company, such consideration shall remain subject to the Right of First Refusal unless the provisions of Section 11.9 result in a termination of the Right of First Refusal.

11.8 **Assignment of Right of First Refusal.** The Company shall have the right to assign the Right of First Refusal at any time, whether or not there has been an attempted transfer, to one or more persons as may be selected by the Company.

11.9 **Early Termination of Right of First Refusal.** The other provisions of this Option Agreement notwithstanding, the Right of First Refusal shall terminate and be of no further force and effect upon (a) the occurrence of a Change in Control, unless the Acquiror assumes the Company's rights and obligations under the Option or substitutes a substantially equivalent option for the Acquiror's stock for the Option, or (b) the existence of a public market for the class of shares subject to the Right of First Refusal. A "**public market**" shall be deemed to exist if (i) such stock is listed on a national securities exchange (as that term is used in the Exchange Act) or (ii) such stock is traded on the over-the-counter market and prices therefor are published daily on business days in a recognized financial journal.

12. **STOCK DISTRIBUTIONS SUBJECT TO OPTION AGREEMENT.**

If, from time to time, there is any stock dividend, stock split or other change, as described in Section 9, in the character or amount of any of the outstanding stock of the corporation the stock of which is subject to the provisions of this Option Agreement, then in such event any and all new, substituted or additional securities to which the Participant is entitled by reason of the Participant's ownership of the shares acquired upon exercise of the Option shall be immediately subject to the Right of First Refusal with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

13. NOTICE OF SALES UPON DISQUALIFYING DISPOSITION.

The Participant shall dispose of the shares acquired pursuant to the Option only in accordance with the provisions of this Option Agreement. In addition, if the Grant Notice designates this Option as an Incentive Stock Option, the Participant shall (a) promptly notify the Chief Financial Officer of the Company if the Participant disposes of any of the shares acquired pursuant to the Option within one (1) year after the date the Participant exercises all or part of the Option or within two (2) years after the Date of Grant and (b) provide the Company with a description of the circumstances of such disposition. Until such time as the Participant disposes of such shares in a manner consistent with the provisions of this Option Agreement, unless otherwise expressly authorized by the Company, the Participant shall hold all shares acquired pursuant to the Option in the Participant's name (and not in the name of any nominee) for the one-year period immediately after the exercise of the Option and the two-year period immediately after Date of Grant. At any time during the one-year or two-year periods set forth above, the Company may place a legend on any certificate representing shares acquired pursuant to the Option requesting the transfer agent for the Company's stock to notify the Company of any such transfers. The obligation of the Participant to notify the Company of any such transfer shall continue notwithstanding that a legend has been placed on the certificate pursuant to the preceding sentence.

14. LEGENDS.

The Company may at any time place legends referencing the Right of First Refusal and any applicable federal, state or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Option Agreement. The Participant shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Participant in order to carry out the provisions of this Section. Unless otherwise specified by the Company, legends placed on such certificates may include, but shall not be limited to, the following:

14.1 "THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED OR HYPOTHECATED UNLESS THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT COVERING SUCH SECURITIES, THE SALE IS MADE IN ACCORDANCE WITH RULE 144 OR RULE 701 UNDER THE ACT, OR THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY, STATING THAT SUCH SALE, TRANSFER, ASSIGNMENT OR HYPOTHECATION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SUCH ACT."

14.2 "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND REPURCHASE OPTIONS IN FAVOR OF THE CORPORATION OR ITS ASSIGNEE SET FORTH IN AN AGREEMENT BETWEEN THE CORPORATION AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS CORPORATION."

14.3 “THE SHARES EVIDENCED BY THIS CERTIFICATE WERE ISSUED BY THE CORPORATION TO THE REGISTERED HOLDER UPON EXERCISE OF AN INCENTIVE STOCK OPTION AS DEFINED IN SECTION 422 OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (“ISO”). IN ORDER TO OBTAIN THE PREFERENTIAL TAX TREATMENT AFFORDED TO ISOs, THE SHARES SHOULD NOT BE TRANSFERRED PRIOR TO [INSERT DISQUALIFYING DISPOSITION DATE HERE]. SHOULD THE REGISTERED HOLDER ELECT TO TRANSFER ANY OF THE SHARES PRIOR TO THIS DATE AND FOREGO ISO TAX TREATMENT, THE TRANSFER AGENT FOR THE SHARES SHALL NOTIFY THE CORPORATION IMMEDIATELY. THE REGISTERED HOLDER SHALL HOLD ALL SHARES PURCHASED UNDER THE INCENTIVE STOCK OPTION IN THE REGISTERED HOLDER’S NAME (AND NOT IN THE NAME OF ANY NOMINEE) PRIOR TO THIS DATE OR UNTIL TRANSFERRED AS DESCRIBED ABOVE.”

15. **LOCK-UP AGREEMENT.**

The Participant hereby agrees that in the event of any underwritten public offering of stock, including an initial public offering of stock, made by the Company pursuant to an effective registration statement filed under the Securities Act, the Participant shall not offer, sell, contract to sell, pledge, hypothecate, grant any option to purchase or make any short sale of, or otherwise dispose of any shares of stock of the Company or any rights to acquire stock of the Company for such period of time from and after the effective date of such registration statement as may be established by the underwriter for such public offering; provided, however, that such period of time shall not exceed one hundred eighty (180) days from the effective date of the registration statement to be filed in connection with such public offering; provided, further, however, that such one hundred eighty (180) day period may be extended for an additional period, not to exceed twenty (20) days, upon the request of the Company or the underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The foregoing limitation shall not apply to shares registered in the public offering under the Securities Act. The Participant hereby agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing within a reasonable timeframe if so requested by the Company.

16. **RESTRICTIONS ON TRANSFER OF SHARES.**

No shares acquired upon exercise of the Option may be sold, exchanged, transferred (including, without limitation, any transfer to a nominee or agent of the Participant), assigned, pledged, hypothecated or otherwise disposed of, including by operation of law in any manner which violates any of the provisions of this Option Agreement, and any such attempted disposition shall be void. The Company shall not be required (a) to transfer on its books any shares which will have been transferred in violation of any of the provisions set forth in this Option Agreement or (b) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares will have been so transferred.

17. MISCELLANEOUS PROVISIONS.

17.1 **Termination or Amendment.** The Board may terminate or amend the Plan or the Option at any time; provided, however, that except as provided in Section 8 in connection with a Change in Control, no such termination or amendment may adversely affect the Option or any unexercised portion hereof without the consent of the Participant unless such termination or amendment is necessary to comply with any applicable law or government regulation, including, but not limited to Section 409A of the Code. No amendment or addition to this Option Agreement shall be effective unless in writing.

17.2 **Compliance with Section 409A.** The Company intends that income realized by the Participant pursuant to the Plan and this Option Agreement will not be subject to taxation under Section 409A of the Code. The provisions of the Plan and this Option Agreement shall be interpreted and construed in favor of satisfying any applicable requirements of Section 409A of the Code. The Company, in its reasonable discretion, may amend (including retroactively) the Plan and this Agreement in order to conform to the applicable requirements of Section 409A of the Code, including amendments to facilitate the Participant's ability to avoid taxation under Section 409A of the Code. **However, the preceding provisions shall not be construed as a guarantee by the Company of any particular tax result for income realized by the Participant pursuant to the Plan or this Option Agreement.** In any event, and except for the responsibilities of the Company set forth in Section 4.4, the Company shall not be responsible for the payment of any applicable taxes incurred by the Participant on income realized by the Participant pursuant to the Plan or this Option Agreement.

17.3 **Further Instruments.** The parties hereto agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Option Agreement.

17.4 **Binding Effect.** This Option Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer set forth herein, be binding upon the Participant and the Participant's heirs, executors, administrators, successors and assigns.

17.5 **Delivery of Documents and Notices.** Any document relating to participation in the Plan, or any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given (except to the extent that this Option Agreement provides for effectiveness only upon actual receipt of such notice) upon personal delivery, electronic delivery at the e-mail address, if any, provided for the Participant by the Company, or upon deposit in the U.S. Post Office or foreign postal service, by registered or certified mail, or with a nationally recognized overnight courier service, with postage and fees prepaid, addressed to the other party at the address of such party set forth in the Grant Notice or at such other address as such party may designate in writing from time to time to the other party.

(a) **Description of Electronic Delivery.** The Plan documents, which may include but do not necessarily include: the Plan, the Grant Notice, this Option Agreement, and any reports of the Company provided generally to the Company's stockholders, may be delivered to the Participant electronically. In addition, if permitted by the Company, the Participant may deliver electronically the Grant Notice and Exercise Notice called for by Section 4.2 to the Company or to such third party involved in administering the Plan as the Company may designate from time to time. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company.

(b) **Consent to Electronic Delivery.** The Participant acknowledges that the Participant has read Section 17.5(a) of this Option Agreement and consents to the electronic delivery of the Plan documents and, if permitted by the Company, the delivery of the Grant Notice and Exercise Notice, as described in Section 17.5(a). The Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to the Participant by contacting the Company by telephone or in writing. The Participant further acknowledges that the Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, the Participant understands that the Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. The Participant may revoke his or her consent to the electronic delivery of documents described in Section 17.5(a) or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Finally, the Participant understands that he or she is not required to consent to electronic delivery of documents described in Section 17.5(a).

17.6 **Integrated Agreement.** The Grant Notice, this Option Agreement and the Plan, together with any employment, service or other agreement with the Participant and the Company referring to the Option, shall constitute the entire understanding and agreement of the Participant and the Company with respect to the subject matter contained herein or therein and supersede any prior agreements, understandings, restrictions, representations, or warranties among the Participant and the Company with respect to such subject matter. To the extent contemplated herein or therein, the provisions of the Grant Notice, the Option Agreement and the Plan shall survive any exercise of the Option and shall remain in full force and effect.

17.7 **Applicable Law.** This Option Agreement shall be governed by the laws of the State of Delaware as such laws are applied to agreements between Delaware residents entered into and to be performed entirely within the State of Delaware.

17.8 **Counterparts.** The Grant Notice may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

- Incentive Stock Option
- Nonstatutory Stock Option

Participant:
Date:

STOCK OPTION EXERCISE NOTICE

Olema Pharmaceuticals, Inc
Attention: Chief Financial Officer
512 2nd Street, 4th Floor
San Francisco, CA 94107

Ladies and Gentlemen:

1. **Option.** I was granted an option (the "**Option**") to purchase shares of the common stock (the "**Shares**") of Olema Pharmaceuticals, Inc., a Delaware corporation (the "**Company**") pursuant to the Company's 2014 Stock Plan (the "**Plan**"), my Notice of Grant of Stock Option (the "**Grant Notice**") and my Stock Option Agreement (the "**Option Agreement**") as follows:

Date of Grant:

Number of Option Shares:

Exercise Price per Share: \$

2. **Exercise of Option.** I hereby elect to exercise the Option to purchase the following number of Shares, all of which are Vested Shares, in accordance with the Grant Notice and the Option Agreement:

Total Shares Purchased:

Total Exercise Price (Total Shares X Price per Share) \$

3. **Payments.** I enclose payment in full of the total exercise price for the Shares in the following form(s), as authorized by my Option Agreement:

Cash: \$

Check:

Stock Tender Exercise: Contact Plan Administrator

Cashless Exercise: Contact Plan Administrator

Net Exercise: Contact Plan Administrator

4. **Tax Withholding.** I authorize payroll withholding and otherwise will make adequate provision for the federal, state, local and foreign tax withholding obligations of the Company, if any, in connection with the Option. If I am exercising a Nonstatutory Stock Option, I enclose payment in full of my withholding taxes, if any, as follows:

(Contact Plan Administrator for amount of tax due.)

- Cash: \$
- Check: \$

5. **Participant Information.**

My address is:

My Social Security Number is:

6. **Notice of Disqualifying Disposition.** If the Option is an Incentive Stock Option, I agree that I will promptly notify the Chief Financial Officer of the Company if I transfer any of the Shares within one (1) year from the date I exercise all or part of the Option or within two (2) years of the Date of Grant.
7. **Binding Effect.** I agree that the Shares are being acquired in accordance with and subject to the terms, provisions and conditions of the Grant Notice, the Option Agreement, including the Right of First Refusal set forth therein, and the Plan, to all of which I hereby expressly assent. This Agreement shall inure to the benefit of and be binding upon my heirs, executors, administrators, successors and assigns.
8. **Transfer.** I understand and acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "***Securities Act***"), and that consequently the Shares must be held indefinitely unless they are subsequently registered under the Securities Act, an exemption from such registration is available, or they are sold in accordance with Rule 144 or Rule 701 under the Securities Act. I further understand and acknowledge that the Company is under no obligation to register the Shares. I understand that the certificate or certificates evidencing the Shares will be imprinted with legends which prohibit the transfer of the Shares unless they are registered or such registration is not required in the opinion of legal counsel satisfactory to the Company.

I am aware that Rule 144 under the Securities Act, which permits limited public resale of securities acquired in a nonpublic offering, is not currently available with respect to the Shares and, in any event, is available only if certain conditions are satisfied. I understand that any sale of the Shares that might be made in reliance upon Rule 144 may only be made in limited amounts in accordance with the terms and conditions of such rule and that a copy of Rule 144 will be delivered to me upon request.

I understand that I am purchasing the Shares pursuant to the terms of the Plan, the Grant Notice and my Option Agreement, copies of which I have received and carefully read and understand.

Very truly yours,

(Signature)

Receipt of the above is hereby acknowledged.

OLEMA PHARMACEUTICALS, INC

By: _____

Name: _____

Title: _____

**OLEMA PHARMACEUTICALS, INC.
NOTICE OF GRANT OF STOCK OPTION
(EARLY EXERCISE PERMITTED)**

The Participant has been granted an option (the "**Option**") to purchase certain shares of Common Stock of Olema Pharmaceuticals, Inc., a Delaware corporation, pursuant to the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the "**Plan**"), as follows:

Participant: _____

Date of Grant: _____

Number of Option Shares: _____, subject to adjustment as provided by the Option Agreement.

Exercise Price: \$ _____

Initial Vesting Date: _____

Option Expiration Date: The date ten (10) years after the Date of Grant

Tax Status of Option: Nonstatutory stock option

Early Exercise: This option may be "early exercised" pursuant to the terms of the attached Stock Option Agreement and the Company's form of Early Exercise Stock Purchase Agreement.

Vested Shares: Except as provided in the Stock Option Agreement, the number of Vested Shares (disregarding any resulting fractional share) as of any date is determined by multiplying the Number of Option Shares by the Vested Ratio determined as of such date as follows:

| | <u>Vested Ratio</u> |
|---|---------------------|
| Prior to Initial Vesting Date | _____ |
| On Initial Vesting Date, provided the Participant's Service has not terminated prior to such date | _____ |
| <u>Plus</u> | |
| For each additional full month of the Participant's continuous Service from Initial Vesting Date until the Vested Ratio equals 1/1, an additional | _____ |

The Exercise Price represents an amount the Company believes to be no less than the fair market value of a share of Stock as of the Date of Grant, determined in good faith in compliance with the requirements of Section 409A of the Code. However, there is no guarantee that the Internal Revenue Service will agree with the Company's determination. A subsequent IRS determination that the Exercise Price is less than such fair market value could result in adverse tax consequences to the Participant. By signing below, the Participant agrees that the Company, its directors, officers and shareholders shall not be held liable for any tax, penalty, interest or cost incurred by the Participant as a result of such determination by the IRS. The Participant is urged to consult with his or her own tax advisor regarding the tax consequences of the Option, including the application of Section 409A.

By their signatures below, the Company and the Participant agree that the Option is governed by this Grant Notice and by the provisions of the Plan and the Stock Option Agreement, both of which are attached to and made a part of this document. The Participant acknowledges receipt of copies of the Plan and the Stock Option Agreement, represents that the Participant has read and is familiar with their provisions, and hereby accepts the Option subject to all of their terms and conditions.

| | |
|------------------------------------|--------------------|
| OLEMA PHARMACEUTICALS, INC. | PARTICIPANT |
| By: _____ | _____ Signature |
| Its: _____ | _____ Date |
| _____ Address | _____ Address |
| _____ | _____ |

ATTACHMENTS: 2014 Stock Plan, as amended to the Date of Grant, Stock Option Agreement and Exercise Notice

THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

OLEMA PHARMACEUTICALS, INC.
STOCK OPTION AGREEMENT

Olema Pharmaceuticals, Inc., a Delaware corporation has granted to the Participant named in the *Notice of Grant of Stock Option* (the “**Grant Notice**”) to which this Stock Option Agreement (the “**Option Agreement**”) is attached an option (the “**Option**”) to purchase certain shares of Stock upon the terms and conditions set forth in the Grant Notice and this Option Agreement. The Option has been granted pursuant to and shall in all respects be subject to the terms and conditions of the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the “**Plan**”), as amended to the Date of Grant, the provisions of which are incorporated herein by reference. By signing the Grant Notice, the Participant: (a) acknowledges receipt of, and represents that the Participant has read and is familiar with, the Grant Notice, this Option Agreement and the Plan, (b) accepts the Option subject to all of the terms and conditions of the Grant Notice, this Option Agreement and the Plan, and (c) agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under the Grant Notice, this Option Agreement or the Plan.

1. **DEFINITIONS AND CONSTRUCTION.**

1.1 **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Grant Notice or the Plan.

1.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of this Option Agreement. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term “or” is not intended to be exclusive, unless the context clearly requires otherwise.

2. **TAX CONSEQUENCES.**

2.1 **Tax Status of Option.** This Option is intended to have the tax status designated in the Grant Notice.

(a) **Incentive Stock Option.** If the Grant Notice so designates, this Option is intended to be an Incentive Stock Option within the meaning of Section 422(b) of the Code, but the Company does not represent or warrant that this Option qualifies as such. The Participant should consult with the Participant’s own tax advisor regarding the tax effects of this 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.

(NOTE TO PARTICIPANT: If the Option is exercised more than three (3) months after the date on which you cease to be an Employee (other than by reason of your death or permanent and total disability as defined in Section 22(e)(3) of the Code), the Option will be treated as a Nonstatutory Stock Option and not as an Incentive Stock Option to the extent required by Section 422 of the Code.)

(b) **Nonstatutory Stock Option.** If the Grant Notice so designates, this Option is intended to be a Nonstatutory Stock Option and shall not be treated as an Incentive Stock Option within the meaning of Section 422(b) of the Code.

2.2 **ISO Fair Market Value Limitation.** If the Grant Notice designates this Option as an Incentive Stock Option, then to the extent that the Option (together with all Incentive Stock Options granted to the Participant under all stock option plans of the Company, including the Plan) becomes exercisable for the first time during any calendar year for shares having a Fair Market Value greater than One Hundred Thousand Dollars (\$100,000), the portion of such options which exceeds such amount will be treated as Nonstatutory Stock Options. For purposes of this Section, options designated as Incentive Stock Options are taken into account in the order in which they were granted, and the Fair Market Value of stock is determined as of the time the option with respect to such stock is granted. If the Code is amended to provide for a different limitation from that set forth in this Section, such different limitation shall be deemed incorporated herein effective as of the date required or permitted by such amendment to the Code. If the Option is treated as an Incentive Stock Option in part and as a Nonstatutory Stock Option in part by reason of the limitation set forth in this Section, the Participant may designate which portion of such Option the Participant is exercising. In the absence of such designation, the Participant shall be deemed to have exercised the Incentive Stock Option portion of the Option first. Separate certificates representing each such portion shall be issued upon the exercise of the Option.

(NOTE TO PARTICIPANT: If the aggregate Exercise Price of the Option (that is, the Exercise Price multiplied by the Number of Option Shares) plus the aggregate exercise price of any other Incentive Stock Options you hold (whether granted pursuant to the Plan or any other stock option plan of the Company) is greater than \$100,000, you should contact the Chief Financial Officer of the Company to ascertain whether the entire Option qualifies as an Incentive Stock Option.)

3. **ADMINISTRATION.**

All questions of interpretation concerning the Grant Notice, this Option Agreement, the Plan or any other form of agreement or other document employed by the Company in the administration of the Plan or the Option shall be determined by the Board. All such determinations by the Board shall be final, binding and conclusive upon all persons having an interest in the Option, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Board in the exercise of its discretion pursuant to the Plan or the Option or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest in the Option. Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, or election which is the responsibility of or which is allocated to the Company herein, provided the Officer has apparent authority with respect to such matter, right, obligation, or election.

4. **EXERCISE OF THE OPTION.**

4.1 **Right to Exercise.** Except as otherwise provided herein, the Option shall be exercisable prior to the termination of the Option (as provided in Section 6), subject to the Company's repurchase rights set forth in Section 11. In no event shall the Option be exercisable for more shares than the Number of Option Shares, as adjusted pursuant to Section 9. The Option may, during the period of the Participant's Service and during the term of the Option, be exercised, including the unvested portion of the Option; provided, however, that: (a) a partial exercise of the Option will be deemed to first cover vested Option Shares and then the earliest vesting installment of unvested Option Shares; (b) any Option Shares so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement; and (c) the Participant will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred.

4.2 **Method of Exercise.** Exercise of the Option shall be by means of electronic or written notice (the "**Exercise Notice**") in a form authorized by the Company. An electronic Exercise Notice must be digitally signed or authenticated by the Participant in such manner as required by the notice and transmitted to the Company or an authorized representative of the Company (including a third-party administrator designated by the Company). In the event that the Participant is not authorized or is unable to provide an electronic Exercise Notice, the Option shall be exercised by a written Exercise Notice addressed to the Company, which shall be signed by the Participant and delivered in person, by certified or registered mail, return receipt requested, by confirmed facsimile transmission, or by such other means as the Company may permit, to the Company, or an authorized representative of the Company (including a third-party administrator designated by the Company). Each Exercise Notice, whether electronic or written, must state the Participant's election to exercise the Option, the number of whole shares of Stock for which the Option is being exercised and such other representations and agreements as to the Participant's investment intent with respect to such shares as may be required pursuant to the provisions of this Option Agreement. Further, each Exercise Notice must be received by the Company prior to the termination of the Option as set forth in Section 6 and must be accompanied by full payment of the aggregate Exercise Price for the number of shares of Stock being purchased. The Option shall be deemed to be exercised upon receipt by the Company of such electronic or written Exercise Notice and the aggregate Exercise Price.

4.3 **Payment of Exercise Price.**

(a) **Forms of Consideration Authorized.** Except as otherwise provided below, payment of the aggregate Exercise Price for the number of shares of Stock for which the Option is being exercised shall be made (i) in cash, by check or in cash equivalent, (ii) if permitted by the Company and subject to the limitations contained in Section 4.3(b), by means of (1) a Stock Tender Exercise, (2) a Cashless Exercise or (3) a Net-Exercise; or (iii) by any combination of the foregoing.

(b) **Limitations on Forms of Consideration.** The Company reserves, at any and all times, the right, in the Company's sole and absolute discretion, to establish, decline to approve or terminate any program or procedure providing for payment of the Exercise Price through any of the means described below, including with respect to the Participant notwithstanding that such program or procedures may be available to others.

(i) **Stock Tender Exercise.** A "**Stock Tender Exercise**" means the delivery of a properly executed Exercise Notice accompanied by (1) the Participant's tender to the Company, or attestation to the ownership, in a form acceptable to the Company of whole shares of Stock having a Fair Market Value that does not exceed the aggregate Exercise Price for the shares with respect to which the Option is exercised, and (2) the Participant's payment to the Company in cash of the remaining balance of such aggregate Exercise Price not satisfied by such shares' Fair Market Value. A Stock Tender Exercise shall not be permitted if it would constitute a violation of the provisions of any law, regulation or agreement restricting the redemption of the Company's stock. If required by the Company, the Option may not be exercised by tender to the Company, or attestation to the ownership, of shares of Stock unless such shares either have been owned by the Participant for a period of time required by the Company (and not used for another option exercise by attestation during such period) or were not acquired, directly or indirectly, from the Company.

(ii) **Cashless Exercise.** A Cashless Exercise shall be permitted only upon the class of shares subject to the Option becoming publicly traded in an established securities market. A "**Cashless Exercise**" means the delivery of a properly executed Exercise Notice together with irrevocable instructions to a broker in a form acceptable to the Company providing for the assignment to the Company of the proceeds of a sale or loan with respect to shares of Stock acquired upon the exercise of the Option in an amount not less than the aggregate Exercise Price for such shares (including, without limitation, through an exercise complying with the provisions of Regulation T as promulgated from time to time by the Board of Governors of the Federal Reserve System).

(iii) **Net-Exercise.** A "**Net-Exercise**" means the delivery of a properly executed Exercise Notice electing a procedure pursuant to which (1) the Company will reduce the number of shares otherwise issuable to the Participant upon the exercise of the Option by the largest whole number of shares having a Fair Market Value that does not exceed the aggregate Exercise Price for the shares with respect to which the Option is exercised, and (2) the Participant shall pay to the Company in cash the remaining balance of such aggregate Exercise Price not satisfied by such reduction in the number of whole shares to be issued. Following a Net-Exercise, the number of shares remaining subject to the Option, if any, shall be reduced by the sum of (1) the net number of shares issued to the Participant upon such exercise, and (2) the number of shares deducted by the Company for payment of the aggregate Exercise Price.

4.4 Tax Withholding.

(a) **In General.** At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Participant hereby authorizes withholding from payroll and any other amounts payable to the Participant, and otherwise agrees to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax (including any social insurance) withholding obligations of the Company, if any, which arise in connection with the Option. The Company shall have no obligation to deliver shares of Stock until the tax withholding obligations of the Company have been satisfied by the Participant.

(b) **Withholding in or Directed Sale of Shares.** The Company shall have the right, but not the obligation, to require the Participant to satisfy all or any portion of the Company's tax withholding obligations upon exercise of the Option by deducting from the shares of Stock otherwise issuable to the Participant upon such exercise a number of whole shares having a fair market value, as determined by the Company as of the date of exercise, not in excess of the amount of such tax withholding obligations determined by the applicable minimum statutory withholding rates. The Company may require the Participant to direct a broker, upon the exercise of the Option, to sell a portion of the shares subject to the Option determined by the Company in its discretion to be sufficient to cover the tax withholding obligations of the Company and to remit an amount equal to such tax withholding obligations to the Company in cash.

4.5 **Beneficial Ownership of Shares; Certificate Registration.** The Participant hereby authorizes the Company, in its sole discretion, to deposit for the benefit of the Participant with any broker with which the Participant has an account relationship of which the Company has notice any or all shares acquired by the Participant pursuant to the exercise of the Option. Except as provided by the preceding sentence, a certificate for the shares as to which the Option is exercised shall be registered in the name of the Participant, or, if applicable, in the names of the heirs of the Participant.

4.6 **Restrictions on Grant of the Option and Issuance of Shares.** The grant of the Option and the issuance of shares of Stock upon exercise of the Option shall be subject to compliance with all applicable requirements of federal, state or foreign law with respect to such securities. The Option may not be exercised if the issuance of shares of Stock upon exercise would constitute a violation of any applicable federal, state or foreign securities laws or other law or regulations or the requirements of any stock exchange or market system upon which the Stock may then be listed. In addition, the Option may not be exercised unless (i) a registration statement under the Securities Act shall at the time of exercise of the Option be in effect with respect to the shares issuable upon exercise of the Option or (ii) in the opinion of legal counsel to the Company, the shares issuable upon exercise of the Option may be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. **THE PARTICIPANT IS CAUTIONED THAT THE OPTION MAY NOT BE EXERCISED UNLESS THE FOREGOING CONDITIONS ARE SATISFIED. ACCORDINGLY, THE PARTICIPANT MAY NOT BE ABLE TO EXERCISE THE OPTION WHEN DESIRED EVEN THOUGH THE OPTION IS VESTED.** The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance and sale of any shares subject to the Option shall relieve the Company of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained. As a condition to the exercise of the Option, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

4.7 **Fractional Shares.** The Company shall not be required to issue fractional shares upon the exercise of the Option.

5. **NONTRANSFERABILITY OF THE OPTION.**

During the lifetime of the Participant, the Option shall be exercisable only by the Participant or the Participant's guardian or legal representative. The Option shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. Following the death of the Participant, the Option, to the extent provided in Section 7, may be exercised by the Participant's legal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

6. **TERMINATION OF THE OPTION.**

The Option shall terminate and may no longer be exercised after the first to occur of (a) the close of business on the Option Expiration Date, (b) the close of business on the last date for exercising the Option following termination of the Participant's Service as described in Section 7, or (c) a Change in Control to the extent provided in Section 8.

7. **EFFECT OF TERMINATION OF SERVICE.**

7.1 **Option Exercisability.** The Option shall terminate immediately upon the Participant's termination of Service to the extent that it is then unvested and shall be exercisable after the Participant's termination of Service to the extent it is then vested only during the applicable time period as determined below and thereafter shall terminate.

(a) **Disability.** If the Participant's Service terminates because of the Disability of the Participant, the Option, to the extent unexercised and exercisable for Vested Shares on the date on which the Participant's Service terminated, may be exercised by the Participant (or the Participant's guardian or legal representative) at any time prior to the expiration of twelve (12) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

(b) **Death.** If the Participant's Service terminates because of the death of the Participant, the Option, to the extent unexercised and exercisable for Vested Shares on the date on which the Participant's Service terminated, may be exercised by the Participant's legal representative or other person who acquired the right to exercise the Option by reason of the Participant's death at any time prior to the expiration of twelve (12) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date. The Participant's Service shall be deemed to have terminated on account of death if the Participant dies within three (3) months after the Participant's termination of Service.

(c) **Termination for Cause.** Notwithstanding any other provision of this Option Agreement, if the Participant's Service is terminated for Cause, the Option shall terminate in its entirety and cease to be exercisable immediately upon such termination of Service.

(d) **Other Termination of Service.** If the Participant's Service terminates for any reason, except Disability, death or Cause, the Option, to the extent unexercised and exercisable for Vested Shares by the Participant on the date on which the Participant's Service terminated, may be exercised by the Participant at any time prior to the expiration of three (3) months after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

7.2 **Extension if Exercise Prevented by Law.** Notwithstanding the foregoing other than termination of the Participant's Service for Cause, if the exercise of the Option within the applicable time periods set forth in Section 7.1 is prevented by the provisions of Section 4.6, the Option shall remain exercisable until the later of (a) thirty (30) days after the date such exercise first would no longer be prevented by such provisions or (b) the end of the applicable time period under Section 7.1, but in any event no later than the Option Expiration Date.

8. **EFFECT OF CHANGE IN CONTROL.**

In the event of a Change in Control, except to the extent that the Board determines to settle the Option in accordance with Section 9.1(c) of the Plan, the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of the Participant, assume or continue in full force and effect the Company's rights and obligations under all or any portion of the Option or substitute for all or any portion of the Option a substantially equivalent option for the Acquiror's stock. For purposes of this Section, the Option or any portion thereof shall be deemed assumed if, following the Change in Control, the Option confers the right to receive, subject to the terms and conditions of the Plan and this Option Agreement, for each share of Stock subject to such portion of the Option immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a holder of a share of Stock on the effective date of the Change in Control was entitled (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Stock); provided, however, that if such consideration is not solely common stock of the Acquiror, the Board may, with the consent of the Acquiror, provide for the consideration to be received upon the exercise of the Option for each share of Stock to consist solely of common stock of the Acquiror equal in Fair Market Value to the per share consideration received by holders of Stock pursuant to the Change in Control. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable future payment of such consideration. The Option shall terminate and cease to be outstanding effective as of the time of consummation of the Change in Control to the extent that the Option is neither assumed or continued by the Acquiror in connection with the Change in Control nor exercised as of the time of the Change in Control. Notwithstanding the foregoing, shares acquired upon exercise of the Option prior to the Change in Control and any consideration received pursuant to the Change in Control with respect to such shares shall continue to be subject to all applicable provisions of this Option Agreement except as otherwise provided herein.

9. ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE.

Subject to any required action by the stockholders of the Company and the requirements of Sections 409A and 424 of the Code to the extent applicable, in the event of any change in the Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Stock (excepting normal cash dividends) that has a material effect on the Fair Market Value of shares of Stock, appropriate and proportionate adjustments shall be made in the number, Exercise Price and kind of shares subject to the Option, in order to prevent dilution or enlargement of the Participant's rights under the Option. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "**effected without receipt of consideration by the Company.**" Any fractional share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number, and the Exercise Price shall be rounded up to the nearest whole cent. In no event may the Exercise Price be decreased to an amount less than the par value, if any, of the stock subject to the Option. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

10. RIGHTS AS A STOCKHOLDER, DIRECTOR, EMPLOYEE OR CONSULTANT.

The Participant shall have no rights as a stockholder with respect to any shares covered by the Option until the date of the issuance of the shares for which the Option has been exercised (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date the shares are issued, except as provided in Section 9. If the Participant is an Employee, the Participant understands and acknowledges that, except as otherwise provided in a separate, written employment agreement between the Company and the Participant, the Participant's employment is "**at will**" and is for no specified term. Nothing in this Option Agreement shall confer upon the Participant any right to continue in the Service of the Company or interfere in any way with any right of the Company to terminate the Participant's Service as a Director, an Employee or Consultant, as the case may be, at any time.

11. RIGHT OF FIRST REFUSAL.

11.1 **Grant of Right of First Refusal.** Except as provided in Section 11.7 and Section 16 below, in the event the Participant, the Participant's legal representative, or other holder of shares acquired upon exercise of the Option proposes to sell, exchange, transfer, pledge, or otherwise dispose of any Vested Shares (the "**Transfer Shares** ") to any person or entity, including, without limitation, any stockholder of the Company, the Company shall have the right to repurchase the Transfer Shares under the terms and subject to the conditions set forth in this Section 11 (the "**Right of First Refusal** ").

11.2 **Notice of Proposed Transfer.** Prior to any proposed transfer of the Transfer Shares, the Participant shall deliver written notice (the “*Transfer Notice*”) to the Company describing fully the proposed transfer, including the number of Transfer Shares, the name and address of the proposed transferee (the “*Proposed Transferee*”) and, if the transfer is voluntary, the proposed transfer price, and containing such information necessary to show the bona fide nature of the proposed transfer. In the event of a bona fide gift or involuntary transfer, the proposed transfer price shall be deemed to be the Fair Market Value of the Transfer Shares, as determined by the Board in good faith. If the Participant proposes to transfer any Transfer Shares to more than one Proposed Transferee, the Participant shall provide a separate Transfer Notice for the proposed transfer to each Proposed Transferee. The Transfer Notice shall be signed by both the Participant and the Proposed Transferee and must constitute a binding commitment of the Participant and the Proposed Transferee for the transfer of the Transfer Shares to the Proposed Transferee subject only to the Right of First Refusal.

11.3 **Bona Fide Transfer.** If the Company determines that the information provided by the Participant in the Transfer Notice is insufficient to establish the bona fide nature of a proposed voluntary transfer, the Company shall give the Participant written notice of the Participant’s failure to comply with the procedure described in this Section 11, and the Participant shall have no right to transfer the Transfer Shares without first complying with the procedure described in this Section 11. The Participant shall not be permitted to transfer the Transfer Shares if the proposed transfer is not bona fide.

11.4 **Exercise of Right of First Refusal.** If the Company determines the proposed transfer to be bona fide, the Company shall have the right to purchase all, but not less than all, of the Transfer Shares (except as the Company and the Participant otherwise agree) at the purchase price and on the terms set forth in the Transfer Notice by delivery to the Participant of a notice of exercise of the Right of First Refusal within thirty (30) days after the date the Transfer Notice is delivered to the Company. The Company’s exercise or failure to exercise the Right of First Refusal with respect to any proposed transfer described in a Transfer Notice shall not affect the Company’s right to exercise the Right of First Refusal with respect to any proposed transfer described in any other Transfer Notice, whether or not such other Transfer Notice is issued by the Participant or issued by a person other than the Participant with respect to a proposed transfer to the same Proposed Transferee. If the Company exercises the Right of First Refusal, the Company and the Participant shall thereupon consummate the sale of the Transfer Shares to the Company on the terms set forth in the Transfer Notice within sixty (60) days after the date the Transfer Notice is delivered to the Company (unless a longer period is offered by the Proposed Transferee); provided, however, that in the event the Transfer Notice provides for the payment for the Transfer Shares other than in cash, the Company shall have the option of paying for the Transfer Shares by the present value cash equivalent of the consideration described in the Transfer Notice as reasonably determined by the Company. For purposes of the foregoing, cancellation of any indebtedness of the Participant to the Company shall be treated as payment to the Participant in cash to the extent of the unpaid principal and any accrued interest canceled. Notwithstanding anything contained in this Section to the contrary, the period during which the Company may exercise the Right of First Refusal and consummate the purchase of the Transfer Shares from the Participant shall terminate no sooner than the completion of a period of eight (8) months following the date on which the Participant acquired the Transfer Shares upon exercise of the Option.

11.5 **Failure to Exercise Right of First Refusal.** If the Company fails to exercise the Right of First Refusal in full (or to such lesser extent as the Company and the Participant otherwise agree) within the period specified in Section 11.4 above, the Participant may conclude a transfer to the Proposed Transferee of the Transfer Shares on the terms and conditions described in the Transfer Notice, provided such transfer occurs not later than ninety (90) days following delivery to the Company of the Transfer Notice or, if applicable, following the end of the period described in the last sentence of Section 11.4. The Company shall have the right to demand further assurances from the Participant and the Proposed Transferee (in a form satisfactory to the Company) that the transfer of the Transfer Shares was actually carried out on the terms and conditions described in the Transfer Notice. No Transfer Shares shall be transferred on the books of the Company until the Company has received such assurances, if so demanded, and has approved the proposed transfer as bona fide. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by the Participant, shall again be subject to the Right of First Refusal and shall require compliance by the Participant with the procedure described in this Section 11.

11.6 **Transferees of Transfer Shares.** All transferees of the Transfer Shares or any interest therein, other than the Company, shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold such Transfer Shares or interest therein subject to all of the terms and conditions of this Option Agreement, including this Section 11 providing for the Right of First Refusal with respect to any subsequent transfer. Any sale or transfer of any shares acquired upon exercise of the Option shall be void unless the provisions of this Section 11 are met.

11.7 **Transfers Not Subject to Right of First Refusal.** The Right of First Refusal shall not apply to any transfer or exchange of the shares acquired upon exercise of the Option if such transfer or exchange is in connection with an Ownership Change Event. If the consideration received pursuant to such transfer or exchange consists of stock of the Company, such consideration shall remain subject to the Right of First Refusal unless the provisions of Section 11.9 result in a termination of the Right of First Refusal.

11.8 **Assignment of Right of First Refusal.** The Company shall have the right to assign the Right of First Refusal at any time, whether or not there has been an attempted transfer, to one or more persons as may be selected by the Company.

11.9 **Early Termination of Right of First Refusal.** The other provisions of this Option Agreement notwithstanding, the Right of First Refusal shall terminate and be of no further force and effect upon (a) the occurrence of a Change in Control, unless the Acquiror assumes the Company's rights and obligations under the Option or substitutes a substantially equivalent option for the Acquiror's stock for the Option, or (b) the existence of a public market for the class of shares subject to the Right of First Refusal. A "**public market**" shall be deemed to exist if (i) such stock is listed on a national securities exchange (as that term is used in the Exchange Act) or (ii) such stock is traded on the over-the-counter market and prices therefor are published daily on business days in a recognized financial journal.

12. STOCK DISTRIBUTIONS SUBJECT TO OPTION AGREEMENT.

If, from time to time, there is any stock dividend, stock split or other change, as described in Section 9, in the character or amount of any of the outstanding stock of the corporation the stock of which is subject to the provisions of this Option Agreement, then in such event any and all new, substituted or additional securities to which the Participant is entitled by reason of the Participant's ownership of the shares acquired upon exercise of the Option shall be immediately subject to the Right of First Refusal with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

13. NOTICE OF SALES UPON DISQUALIFYING DISPOSITION.

The Participant shall dispose of the shares acquired pursuant to the Option only in accordance with the provisions of this Option Agreement. In addition, if the Grant Notice designates this Option as an Incentive Stock Option, the Participant shall (a) promptly notify the Chief Financial Officer of the Company if the Participant disposes of any of the shares acquired pursuant to the Option within one (1) year after the date the Participant exercises all or part of the Option or within two (2) years after the Date of Grant and (b) provide the Company with a description of the circumstances of such disposition. Until such time as the Participant disposes of such shares in a manner consistent with the provisions of this Option Agreement, unless otherwise expressly authorized by the Company, the Participant shall hold all shares acquired pursuant to the Option in the Participant's name (and not in the name of any nominee) for the one-year period immediately after the exercise of the Option and the two-year period immediately after Date of Grant. At any time during the one-year or two-year periods set forth above, the Company may place a legend on any certificate representing shares acquired pursuant to the Option requesting the transfer agent for the Company's stock to notify the Company of any such transfers. The obligation of the Participant to notify the Company of any such transfer shall continue notwithstanding that a legend has been placed on the certificate pursuant to the preceding sentence.

14. LEGENDS.

The Company may at any time place legends referencing the Right of First Refusal and any applicable federal, state or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Option Agreement. The Participant shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Participant in order to carry out the provisions of this Section. Unless otherwise specified by the Company, legends placed on such certificates may include, but shall not be limited to, the following:

14.1 "THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED OR HYPOTHECATED UNLESS THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT COVERING SUCH SECURITIES, THE SALE IS MADE IN ACCORDANCE WITH RULE 144 OR RULE 701 UNDER THE ACT, OR THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY, STATING THAT SUCH SALE, TRANSFER, ASSIGNMENT OR HYPOTHECATION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SUCH ACT."

14.2 "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND REPURCHASE OPTIONS IN FAVOR OF THE CORPORATION OR ITS ASSIGNEE SET FORTH IN AN AGREEMENT BETWEEN THE CORPORATION AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS CORPORATION."

14.3 “THE SHARES EVIDENCED BY THIS CERTIFICATE WERE ISSUED BY THE CORPORATION TO THE REGISTERED HOLDER UPON EXERCISE OF AN INCENTIVE STOCK OPTION AS DEFINED IN SECTION 422 OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (“ISO”). IN ORDER TO OBTAIN THE PREFERENTIAL TAX TREATMENT AFFORDED TO ISOs, THE SHARES SHOULD NOT BE TRANSFERRED PRIOR TO [INSERT DISQUALIFYING DISPOSITION DATE HERE]. SHOULD THE REGISTERED HOLDER ELECT TO TRANSFER ANY OF THE SHARES PRIOR TO THIS DATE AND FOREGO ISO TAX TREATMENT, THE TRANSFER AGENT FOR THE SHARES SHALL NOTIFY THE CORPORATION IMMEDIATELY. THE REGISTERED HOLDER SHALL HOLD ALL SHARES PURCHASED UNDER THE INCENTIVE STOCK OPTION IN THE REGISTERED HOLDER’S NAME (AND NOT IN THE NAME OF ANY NOMINEE) PRIOR TO THIS DATE OR UNTIL TRANSFERRED AS DESCRIBED ABOVE.”

15. **LOCK-UP AGREEMENT.**

The Participant hereby agrees that in the event of any underwritten public offering of stock, including an initial public offering of stock, made by the Company pursuant to an effective registration statement filed under the Securities Act, the Participant shall not offer, sell, contract to sell, pledge, hypothecate, grant any option to purchase or make any short sale of, or otherwise dispose of any shares of stock of the Company or any rights to acquire stock of the Company for such period of time from and after the effective date of such registration statement as may be established by the underwriter for such public offering; provided, however, that such period of time shall not exceed one hundred eighty (180) days from the effective date of the registration statement to be filed in connection with such public offering; provided, further, however, that such one hundred eighty (180) day period may be extended for an additional period, not to exceed twenty (20) days, upon the request of the Company or the underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The foregoing limitation shall not apply to shares registered in the public offering under the Securities Act. The Participant hereby agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing within a reasonable timeframe if so requested by the Company.

16. **RESTRICTIONS ON TRANSFER OF SHARES.**

No shares acquired upon exercise of the Option may be sold, exchanged, transferred (including, without limitation, any transfer to a nominee or agent of the Participant), assigned, pledged, hypothecated or otherwise disposed of, including by operation of law in any manner which violates any of the provisions of this Option Agreement, and any such attempted disposition shall be void. The Company shall not be required (a) to transfer on its books any shares which will have been transferred in violation of any of the provisions set forth in this Option Agreement or (b) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares will have been so transferred.

17. MISCELLANEOUS PROVISIONS.

17.1 **Termination or Amendment.** The Board may terminate or amend the Plan or the Option at any time; provided, however, that except as provided in Section 8 in connection with a Change in Control, no such termination or amendment may adversely affect the Option or any unexercised portion hereof without the consent of the Participant unless such termination or amendment is necessary to comply with any applicable law or government regulation, including, but not limited to Section 409A of the Code. No amendment or addition to this Option Agreement shall be effective unless in writing.

17.2 **Compliance with Section 409A.** The Company intends that income realized by the Participant pursuant to the Plan and this Option Agreement will not be subject to taxation under Section 409A of the Code. The provisions of the Plan and this Option Agreement shall be interpreted and construed in favor of satisfying any applicable requirements of Section 409A of the Code. The Company, in its reasonable discretion, may amend (including retroactively) the Plan and this Agreement in order to conform to the applicable requirements of Section 409A of the Code, including amendments to facilitate the Participant's ability to avoid taxation under Section 409A of the Code. **However, the preceding provisions shall not be construed as a guarantee by the Company of any particular tax result for income realized by the Participant pursuant to the Plan or this Option Agreement.** In any event, and except for the responsibilities of the Company set forth in Section 4.4, no the Company shall not be responsible for the payment of any applicable taxes incurred by the Participant on income realized by the Participant pursuant to the Plan or this Option Agreement.

17.3 **Further Instruments.** The parties hereto agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Option Agreement.

17.4 **Binding Effect.** This Option Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer set forth herein, be binding upon the Participant and the Participant's heirs, executors, administrators, successors and assigns.

17.5 **Delivery of Documents and Notices.** Any document relating to participation in the Plan, or any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given (except to the extent that this Option Agreement provides for effectiveness only upon actual receipt of such notice) upon personal delivery, electronic delivery at the e-mail address, if any, provided for the Participant by the Company, or upon deposit in the U.S. Post Office or foreign postal service, by registered or certified mail, or with a nationally recognized overnight courier service, with postage and fees prepaid, addressed to the other party at the address of such party set forth in the Grant Notice or at such other address as such party may designate in writing from time to time to the other party.

(a) **Description of Electronic Delivery.** The Plan documents, which may include but do not necessarily include: the Plan, the Grant Notice, this Option Agreement, and any reports of the Company provided generally to the Company's stockholders, may be delivered to the Participant electronically. In addition, if permitted by the Company, the Participant may deliver electronically the Grant Notice and Exercise Notice called for by Section 4.2 to the Company or to such third party involved in administering the Plan as the Company may designate from time to time. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company.

(b) **Consent to Electronic Delivery.** The Participant acknowledges that the Participant has read Section 17.5(a) of this Option Agreement and consents to the electronic delivery of the Plan documents and, if permitted by the Company, the delivery of the Grant Notice and Exercise Notice, as described in Section 17.5(a). The Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to the Participant by contacting the Company by telephone or in writing. The Participant further acknowledges that the Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, the Participant understands that the Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. The Participant may revoke his or her consent to the electronic delivery of documents described in Section 17.5(a) or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Finally, the Participant understands that he or she is not required to consent to electronic delivery of documents described in Section 17.5(a).

17.6 **Integrated Agreement.** The Grant Notice, this Option Agreement and the Plan, together with any employment, service or other agreement with the Participant and the Company referring to the Option, shall constitute the entire understanding and agreement of the Participant and the Company with respect to the subject matter contained herein or therein and supersede any prior agreements, understandings, restrictions, representations, or warranties among the Participant and the Company with respect to such subject matter. To the extent contemplated herein or therein, the provisions of the Grant Notice, the Option Agreement and the Plan shall survive any exercise of the Option and shall remain in full force and effect.

17.7 **Applicable Law.** This Option Agreement shall be governed by the laws of the State of Delaware as such laws are applied to agreements between Delaware residents entered into and to be performed entirely within the State of Delaware.

17.8 **Counterparts.** The Grant Notice may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

OLEMA PHARMACEUTICALS, INC.

EARLY EXERCISE STOCK PURCHASE AGREEMENT
UNDER THE 2014 STOCK PLAN

This Agreement is made by and between **Olema Pharmaceuticals, Inc.**, a Delaware corporation (the "**Company**"), and the individual designated on the signature page hereto as a Purchaser ("**Purchaser**").

Recitals

- A. Purchaser holds a stock option, granted on _____, to purchase _____ shares of common stock ("**Common Stock**") of the Company (the "**Option**") pursuant to the Company's 2014 Stock Plan, as amended (the "**Plan**").
- B. The Option consists of a Stock Option Grant Notice and a Stock Option Agreement.
- C. Purchaser desires to exercise the Option on the terms and conditions contained herein.
- D. Purchaser wishes to take advantage of the early exercise provision of Purchaser's Option and therefore to enter into this Agreement.

Agreement

The parties agree as follows:

1. Incorporation of Plan and Option by Reference. This Agreement is subject to all of the terms and conditions as set forth in the Plan and the Option. If there is a conflict between the terms of this Agreement and/or the Option and the terms of the Plan, the terms of the Plan will control. If there is a conflict between the terms of this Agreement and the terms of the Option, the terms of the Option will control. Defined terms not explicitly defined in this Agreement but defined in the Plan will have the same definitions as in the Plan. Defined terms not explicitly defined in this Agreement or the Plan but defined in the Option will have the same definitions as in the Option.

2. Purchase and Sale of Common Stock.

(a) Agreement to purchase and sell Common Stock. Purchaser hereby agrees to purchase from the Company, and the Company hereby agrees to sell to Purchaser, shares of the Common Stock of the Company in accordance with the Notice of Exercise duly executed by Purchaser and attached hereto as Exhibit A.

(b) Closing. The closing hereunder, including payment for and delivery of the Common Stock, will occur at the offices of the Company immediately following the execution of this Agreement, or at such other time and place as the parties may mutually agree; *provided, however*, that if stockholder approval of the Plan is required before the Option may be exercised, then the Option may not be exercised, and the closing will be delayed, until such stockholder approval is obtained. If such stockholder approval is not obtained within the time limit specified in the Plan, then this Agreement is null and void.

3. Unvested Share Repurchase Option.

(a) Repurchase Option. In the event Purchaser's Service terminates, then the Company has an irrevocable option (the "**Repurchase Option**") for a period of six months after said termination (or in the case of shares issued upon exercise of the Option after such date of termination, within six months after the date of the exercise), or such longer period as may be agreed to by the Company and Purchaser (the "**Repurchase Period**"), to repurchase from Purchaser or Purchaser's personal representative, as the case may be, those shares that Purchaser received pursuant to the exercise of the Option that have not as yet vested as of such termination date in accordance with the Vesting Schedule indicated on Purchaser's Stock Option Grant Notice (the "**Unvested Shares**").

(b) **Share Repurchase Price.** The Company may repurchase all or any of the Unvested Shares at the lower of (i) the Fair Market Value of the such shares (as determined under the Plan) on the date of repurchase, or (ii) the price equal to Purchaser's Exercise Price for such shares as indicated on Purchaser's Stock Option Grant Notice.

4. **Exercise of Repurchase Option.** The Repurchase Option will be exercised by written notice signed by such person as designated by the Company, and delivered or mailed as provided herein. Such notice will identify the number of shares of Common Stock to be purchased and will notify Purchaser of the time, place and date for settlement of such purchase, which will be scheduled by the Company within the term of the Repurchase Option set forth above. In addition, the Company will be deemed to have exercised the Repurchase Option as of the last day of the Repurchase Period, unless an officer of the Company notifies the holder of the Unvested Shares during the Repurchase Period in writing (delivered or mailed as provided herein) that the Company expressly declines to exercise its Repurchase Option for some or all of the Unvested Shares. The Company will be entitled to pay for any shares of Common Stock purchased pursuant to its Repurchase Option at the Company's option in cash or by offset against any indebtedness owing to the Company by Purchaser (including without limitation any Promissory Note given in payment for the Common Stock), or by a combination of both. Upon exercise of the Repurchase Option and payment of the purchase price in any of the ways described above, the Company will become the legal and beneficial owner of the Common Stock being repurchased and all rights and interest therein or related thereto, and the Company will have the right to transfer to its own name the Common Stock being repurchased by the Company, without further action by Purchaser.

5. **Capitalization Adjustments to Common Stock.** In the event of a Capitalization Adjustment, then any and all new, substituted or additional securities or other property to which Purchaser is entitled by reason of Purchaser's ownership of Common Stock will be immediately subject to the Repurchase Option and be included in the word "Common Stock" for all purposes of the Repurchase Option with the same force and effect as the shares of the Common Stock presently subject to the Repurchase Option, but only to the extent the Common Stock is, at the time, covered by such Repurchase Option. While the total Option Price will remain the same after each such event, the Option Price per share of Common Stock upon exercise of the Repurchase Option will be appropriately adjusted.

6. **Corporate Transactions.** In the event of a Corporate Transaction, then the Repurchase Option may be assigned by the Company to the successor of the Company (or such successor's parent company), if any, in connection with such Corporate Transaction. To the extent the Repurchase Option remains in effect following such Corporate Transaction, it will apply to the new capital stock or other property received in exchange for the Common Stock in consummation of the Corporate Transaction, but only to the extent the Common Stock was at the time covered by such right. Appropriate adjustments will be made to the price per share payable upon exercise of the Repurchase Option to reflect the Corporate Transaction upon the Company's capital structure; *provided, however*, that the aggregate price payable upon exercise of the Repurchase Option remains the same.

7. **Escrow of Unvested Common Stock.** As security for Purchaser's faithful performance of the terms of this Agreement and to insure the availability for delivery of Purchaser's Common Stock upon exercise of the Repurchase Option herein provided for, Purchaser agrees, at the closing hereunder, to deliver to and deposit with the Secretary of the Company or the Secretary's designee ("**Escrow Agent**"), as Escrow Agent in this transaction, three stock assignments duly endorsed (with date and number of shares blank) in the form attached hereto as Exhibit B, together with a certificate or certificates evidencing all of the Common Stock subject to the Repurchase Option; said documents are to be held by the Escrow Agent and delivered by said Escrow Agent pursuant to the Joint Escrow Instructions of the Company and Purchaser set forth in Exhibit C, attached hereto and incorporated by this reference, which instructions also will be delivered to the Escrow Agent at the closing hereunder.

8. Rights of Purchaser. Subject to the provisions of the Option, Purchaser will exercise all rights and privileges of a stockholder of the Company with respect to the shares deposited in escrow. Purchaser will be deemed to be the holder of the shares for purposes of receiving any dividends that may be paid with respect to such shares and for purposes of exercising any voting rights relating to such shares, even if some or all of such shares have not yet vested and been released from the Company's Repurchase Option.

9. Limitations on Transfer. In addition to any other limitation on transfer created by applicable securities laws, Purchaser will not sell, assign, hypothecate, donate, encumber or otherwise dispose of any interest in the Common Stock while the Common Stock is subject to the Repurchase Option. After any Common Stock has been released from the Repurchase Option, Purchaser will not sell, assign, hypothecate, donate, encumber or otherwise dispose of any interest in the Common Stock except in compliance with the provisions herein and applicable securities laws. Furthermore, the Common Stock is subject to any right of first refusal in favor of the Company or its assignees or other transfer restrictions that may be contained in the Option.

10. Restrictive Legends. All certificates representing the Common Stock will have endorsed thereon legends in substantially the following forms (in addition to any other legend that may be required by other agreements between the parties hereto):

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AN OPTION SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS COMPANY. ANY TRANSFER OR ATTEMPTED TRANSFER OF ANY SHARES SUBJECT TO SUCH OPTION IS VOID WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF THE COMPANY."

(b) "THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED OR HYPOTHECATED UNLESS THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT COVERING SUCH SECURITIES, THE SALE IS MADE IN ACCORDANCE WITH RULE 144 OR RULE 701 UNDER THE ACT, OR THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY, STATING THAT SUCH SALE, TRANSFER, ASSIGNMENT OR HYPOTHECATION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SUCH ACT."

(c) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND REPURCHASE OPTIONS IN FAVOR OF THE CORPORATION OR ITS ASSIGNEE SET FORTH IN AN AGREEMENT BETWEEN THE CORPORATION AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS CORPORATION."

(d) Only if the Option is an incentive stock option, “THE SHARES EVIDENCED BY THIS CERTIFICATE WERE ISSUED BY THE CORPORATION TO THE REGISTERED HOLDER UPON EXERCISE OF AN INCENTIVE STOCK OPTION AS DEFINED IN SECTION 422 OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (“ISO”). IN ORDER TO OBTAIN THE PREFERENTIAL TAX TREATMENT AFFORDED TO ISOs, THE SHARES SHOULD NOT BE TRANSFERRED PRIOR TO *[INSERT DISQUALIFYING DISPOSITION DATE HERE]*. SHOULD THE REGISTERED HOLDER ELECT TO TRANSFER ANY OF THE SHARES PRIOR TO THIS DATE AND FOREGO ISO TAX TREATMENT, THE TRANSFER AGENT FOR THE SHARES SHALL NOTIFY THE CORPORATION IMMEDIATELY. THE REGISTERED HOLDER SHALL HOLD ALL SHARES PURCHASED UNDER THE INCENTIVE STOCK OPTION IN THE REGISTERED HOLDER’S NAME (AND NOT IN THE NAME OF ANY NOMINEE) PRIOR TO THIS DATE OR UNTIL TRANSFERRED AS DESCRIBED ABOVE.”

(e) Any legend required by appropriate blue sky officials, the Bylaws of the Company, or any other agreement to which Purchaser and the Company are parties.

11. Investment Representations. In connection with the purchase of the Common Stock, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company’s business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Common Stock. Purchaser is acquiring the Common Stock for investment for Purchaser’s own account only and not with a view to, or for resale in connection with, any “distribution” thereof within the meaning of the Securities Act.

(b) Purchaser understands that the Common Stock has not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser’s investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the Common Stock must be held indefinitely unless the Common Stock is subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the Common Stock. Purchaser understands that the certificate evidencing the Common Stock will be imprinted with a legend that prohibits the transfer of the Common Stock unless the Common Stock is registered or such registration is not required in the opinion of counsel for the Company.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, under the Securities Act, as in effect from time to time, which, in substance, permit limited public resale of “restricted securities” acquired, directly or indirectly, from the issuer thereof (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of issuance of the securities, such issuance will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the securities exempt under Rule 701 may be sold by Purchaser 90 days thereafter, subject to the satisfaction of certain of the conditions specified by Rule 144 and the market stand-off provision described in Purchaser’s Stock Option Agreement.

(e) In the event that the sale of the Common Stock does not qualify under Rule 701 at the time of purchase, then the Common Stock may be resold by Purchaser in certain limited circumstances subject to the provisions of Rule 144, which requires, among other things: (i) the availability of certain public information about the Company, and (ii) the resale occurring following the required holding period under Rule 144 after Purchaser has purchased, and made full payment of (within the meaning of Rule 144), the securities to be sold.

(f) Purchaser further understands that at the time Purchaser wishes to sell the Common Stock there may be no public market upon which to make such a sale, and that, even if such a public market then exists, the Company may not be satisfying the current public current information requirements of Rule 144 or 701, and that, in such event, Purchaser would be precluded from selling the Common Stock under Rule 144 or 701 even if the minimum holding period requirement had been satisfied.

(g) Purchaser further warrants and represents that Purchaser has either (i) preexisting personal or business relationships, with the Company or any of its officers, directors or controlling persons, or (ii) the capacity to protect his own interests in connection with the purchase of the Common Stock by virtue of the business or financial expertise of Purchaser or of professional advisors to Purchaser who are unaffiliated with and who are not compensated by the Company or any of its affiliates, directly or indirectly. Purchaser further warrants and represents that Purchaser's purchase the Common Stock was not accomplished by the publication of any advertisement.

12. Section 83(b) Election. Purchaser understands that Section 83(a) of the Code taxes as ordinary income the difference between the amount paid for the Common Stock and the fair market value of the Common Stock as of the date any restrictions on the Common Stock lapse. In this context, "restriction" includes the right of the Company to buy back the Common Stock pursuant to the Repurchase Option set forth above. Purchaser understands that Purchaser may elect to be taxed at the time the Common Stock is purchased, rather than when and as the Repurchase Option expires, by filing an election under Section 83(b) (an "**83(b) Election**") of the Code with the Internal Revenue Service within 30 days of the date of purchase, a copy of which is included as Exhibit D. Even if the fair market value of the Common Stock at the time of the execution of this Agreement equals the amount paid for the Common Stock, the 83(b) Election must be made to avoid income under Section 83(a) in the future. Purchaser understands that failure to file such an 83(b) Election in a timely manner may result in adverse tax consequences for Purchaser. Purchaser further understands that Purchaser must file an additional copy of such 83(b) Election with his or her federal income tax return for the calendar year in which the date of this Agreement falls. Purchaser acknowledges that the foregoing is only a summary of the effect of United States federal income taxation with respect to purchase of the Common Stock hereunder, and does not purport to be complete. Purchaser further acknowledges that the Company has directed Purchaser to seek independent advice regarding the applicable provisions of the Code, the income tax laws of any municipality, state or foreign country in which Purchaser may reside, and the tax consequences of Purchaser's death. Purchaser assumes all responsibility for filing an 83(b) Election and paying all taxes resulting from such election or the lapse of the restrictions on the Common Stock.

13. Refusal to Transfer. The Company is not required (a) to transfer on its books any shares of Common Stock of the Company that have been transferred in violation of any of the provisions set forth in this Agreement, or (b) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares have been so transferred.

14. No Employment Rights. This Agreement is not an employment contract and nothing in this Agreement affects in any manner whatsoever the right or power of the Company or its Affiliates to terminate Purchaser's employment for any reason at any time, with or without cause and with or without notice.

15. **Miscellaneous.**

(a) **Notices.** All notices required or permitted hereunder will be in writing and will be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed facsimile if sent during normal business hours of the recipient, and if not during normal business hours of the recipient, then on the next business day, (iii) five calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one business day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications will be sent to the other party hereto at such party's address hereinafter set forth on the signature page hereof, or at such other address as such party may designate by 10 days' advance written notice to the other party hereto.

(b) **Successors and Assigns.** This Agreement will inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer herein set forth, be binding upon Purchaser, Purchaser's successors, and assigns. The Company may assign the Repurchase Option hereunder at any time or from time to time, in whole or in part.

(c) **Attorneys' Fees; Specific Performance.** Purchaser will reimburse the Company for all costs incurred by the Company in enforcing the performance of, or protecting its rights under, any part of this Agreement, including reasonable costs of investigation and attorneys' fees. It is the intention of the parties that the Company, upon exercise of the Repurchase Option and payment for the shares repurchased, pursuant to the terms of this Agreement, will be entitled to receive the Common Stock, *in specie*, in order to have such Common Stock available for future issuance without dilution of the holdings of other stockholders. Furthermore, it is expressly agreed between the parties that money damages are inadequate to compensate the Company for the Common Stock and that the Company will, upon proper exercise of the Repurchase Option, be entitled to specific enforcement of its rights to purchase and receive said Common Stock.

(d) **Governing Law; Venue.** This Agreement will be governed by and construed in accordance with the laws of the State of Delaware. The parties agree that any action brought by either party to interpret or enforce any provision of this Agreement will be brought in, and each party agrees to, and does hereby, submit to the jurisdiction and venue of, the appropriate state or federal court for the district encompassing the Company's principal place of business.

(e) **Further Execution.** The parties agree to take all such further action(s) as may reasonably be necessary to carry out and consummate this Agreement as soon as practicable, and to take whatever steps may be necessary to obtain any governmental approval in connection with or otherwise qualify the issuance of the securities that are the subject of this Agreement.

(f) **Independent Counsel.** Purchaser acknowledges that this Agreement has been prepared on behalf of the Company by Cooley LLP, counsel to the Company and that Cooley LLP does not represent, and is not acting on behalf of, Purchaser in any capacity. Purchaser has been provided with an opportunity to consult with Purchaser's own counsel with respect to this Agreement.

(g) **Entire Agreement; Amendment.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes and merges all prior agreements or understandings, whether written or oral. This Agreement may not be amended, modified or revoked, in whole or in part, except by an agreement in writing signed by each of the parties hereto.

(h) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision will be excluded from this Agreement, (ii) the balance of the Agreement will be interpreted as if such provision were so excluded and (iii) the balance of the Agreement will be enforceable in accordance with its terms.

(i) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[Remainder of page intentionally left blank]

The parties hereto have executed this Agreement as of _____.

COMPANY:

OLEMA PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

Email: _____

PURCHASER:

(Signature)

Name (Please Print)

Email

ATTACHMENTS:

- Exhibit A Notice of Exercise
- Exhibit B Assignment Separate from Certificate
- Exhibit C Joint Escrow Instructions
- Exhibit D Form of 83(b) Election

[Signature Page to Early Exercise Stock Purchase Agreement]

EXHIBIT A
NOTICE OF EXERCISE

- Incentive Stock Option
- Nonstatutory Stock Option
- Early Exercise Permitted

Participant:
Date:

STOCK OPTION EXERCISE NOTICE

Olema Pharmaceuticals, Inc
Attention: Chief Financial Officer
512 2nd Street, 4th Floor
San Francisco, CA 94107

Ladies and Gentlemen:

1. **Option.** I was granted an option (the "**Option**") to purchase shares of the common stock (the "**Shares**") of Olema Pharmaceuticals, Inc., a Delaware corporation (the "**Company**") pursuant to the Company's 2014 Stock Plan (the "**Plan**"), my Notice of Grant of Stock Option (the "**Grant Notice**") and my Stock Option Agreement (the "**Option Agreement**") as follows:

Date of Grant:

Number of Option Shares:

Exercise Price per Share: \$

2. **Exercise of Option.** I hereby elect to exercise the Option to purchase the following number of Shares, all of which are Vested Shares, in accordance with the Grant Notice and the Option Agreement:

Total Shares Purchased:

Total Exercise Price (Total Shares X Price per Share) \$

3. **Payments.** I enclose payment in full of the total exercise price for the Shares in the following form(s), as authorized by my Option Agreement:

- Cash: \$
- Check:
- Stock Tender Exercise: Contact Plan Administrator
- Cashless Exercise: Contact Plan Administrator
- Net Exercise: Contact Plan Administrator

4. **Tax Withholding.** I authorize payroll withholding and otherwise will make adequate provision for the federal, state, local and foreign tax withholding obligations of the Company, if any, in connection with the Option. If I am exercising a Nonstatutory Stock Option, I enclose payment in full of my withholding taxes, if any, as follows:

(Contact Plan Administrator for amount of tax due.)

- Cash: \$
- Check: \$

5. **Participant Information.**

My address is:

My Social Security Number is:

6. **Notice of Disqualifying Disposition.** If the Option is an Incentive Stock Option, I agree that I will promptly notify the Chief Financial Officer of the Company if I transfer any of the Shares within one (1) year from the date I exercise all or part of the Option or within two (2) years of the Date of Grant.
7. **Binding Effect.** I agree that the Shares are being acquired in accordance with and subject to the terms, provisions and conditions of the Grant Notice, the Option Agreement, including the Right of First Refusal set forth therein, and the Plan, to all of which I hereby expressly assent. This Agreement shall inure to the benefit of and be binding upon my heirs, executors, administrators, successors and assigns.
8. **Transfer.** I understand and acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "***Securities Act***"), and that consequently the Shares must be held indefinitely unless they are subsequently registered under the Securities Act, an exemption from such registration is available, or they are sold in accordance with Rule 144 or Rule 701 under the Securities Act. I further understand and acknowledge that the Company is under no obligation to register the Shares. I understand that the certificate or certificates evidencing the Shares will be imprinted with legends which prohibit the transfer of the Shares unless they are registered or such registration is not required in the opinion of legal counsel satisfactory to the Company.

I am aware that Rule 144 under the Securities Act, which permits limited public resale of securities acquired in a nonpublic offering, is not currently available with respect to the Shares and, in any event, is available only if certain conditions are satisfied. I understand that any sale of the Shares that might be made in reliance upon Rule 144 may only be made in limited amounts in accordance with the terms and conditions of such rule and that a copy of Rule 144 will be delivered to me upon request.

I understand that I am purchasing the Shares pursuant to the terms of the Plan, the Grant Notice and my Option Agreement, copies of which I have received and carefully read and understand.

Very truly yours,

(Signature)

Receipt of the above is hereby acknowledged.

OLEMA PHARMACEUTICALS, INC

By: _____
Title: _____
Dated: _____

EXHIBIT B

STOCK ASSIGNMENT SEPARATE FROM CERTIFICATE

For Value Received, the undersigned hereby sells, assigns and transfers unto **Olema Pharmaceuticals, Inc.**, a Delaware corporation (the "**Company**"), pursuant to the Repurchase Option under that certain Early Exercise Stock Purchase Agreement, dated _____, by and between the undersigned and the Company (the "**Agreement**") _____ shares of Common Stock of the Company standing in the undersigned's name on the books of the Company represented by Certificate No[s] _____ and does hereby irrevocably constitute and appoint both the Company's Secretary and the Company's attorney, or either of them, to transfer said stock on the books of the Company with full power of substitution in the premises. This Assignment may be used only in accordance with and subject to the terms and conditions of the Agreement, in connection with the repurchase of shares of Common Stock issued to the undersigned pursuant to the Agreement, and only to the extent that such shares remain subject to the Company's Repurchase Option under the Agreement.

Dated: _____
(leave blank)

(Signature)

Name (Please Print)

Instruction: *Please do not fill in any blanks other than the signature line. Do not fill in the date line.* The purpose of this Assignment is to enable the Company to exercise its Repurchase Option set forth in the Agreement without requiring additional signatures on the part of Purchaser.

EXHIBIT C

JOINT ESCROW INSTRUCTIONS

JOINT ESCROW INSTRUCTIONS

_____, 20__

Secretary
Olema Pharmaceuticals, Inc.
512 2nd Street, 4th Floor
San Francisco, California 95107

Ladies and Gentlemen:

As Escrow Agent for both **Olema Pharmaceuticals, Inc.**, a Delaware corporation ("**Company**") and the purchaser listed on the signature page hereto ("**Purchaser**"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of that certain Early Exercise Stock Purchase Agreement dated as of _____ ("**Agreement**"), to which a copy of these Joint Escrow Instructions is attached as an Exhibit, in accordance with the following instructions:

1. In the event Company or an assignee elects to exercise the Repurchase Option set forth in the Agreement, the Company or its assignee will give to Purchaser and you a written notice specifying the number of shares of stock to be acquired and the time for a closing thereunder at the principal office of the Company. Purchaser and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

2. At the closing, you are directed (a) to date the stock assignments necessary for the transfer in question, (b) to fill in the number of shares being transferred, and (c) to deliver the same, together with the certificate evidencing the shares of stock to be transferred, to the Company.

3. Purchaser irrevocably authorizes the Company to deposit with you any certificates evidencing shares of stock to be held by you hereunder and any additions and substitutions to said shares as specified in the Agreement. Purchaser does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such securities all documents necessary or appropriate to make such securities negotiable and complete any transaction herein contemplated, including but not limited to any appropriate filing with state or government officials or bank officials. Subject to the provisions of this paragraph 3, Purchaser will exercise all rights and privileges of a stockholder of the Company while the stock is held by you.

4. This escrow terminates and the shares of stock held hereunder are released in full upon the exercise or expiration in full of the Repurchase Option, whichever occurs first.

5. If at the time of termination of this escrow under Section 4 herein you should have in your possession any documents, securities, or other property belonging to Purchaser, you will deliver all of the same to Purchaser and will be discharged of all further obligations hereunder; provided, however, that if at the time of termination of this escrow you are advised by the Company that any property subject to this escrow is the subject of a pledge or other security agreement, you will deliver all such property to the pledgeholder or other person designated by the Company.

6. Except as otherwise provided in these Joint Escrow Instructions, your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

7. You are obligated only for the performance of such duties as are specifically set forth herein and may rely and are protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You are not personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Purchaser while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys is conclusive evidence of such good faith.

8. You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or entity, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree of any court, you are not liable to any of the parties hereto or to any other person, firm or corporation by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

9. You are not liable in any respect on account of the identity, authorities or rights of the parties executing or delivering or purporting to execute or deliver these Joint Escrow Instructions documents or papers deposited or called for hereunder.

10. You are not liable for the outlawing of any rights under any statute of limitations with respect to these Joint Escrow Instructions or any documents deposited with you.

11. Your responsibilities as Escrow Agent hereunder terminate if you cease to be Secretary of the Company or if you resign by written notice to the Company. In the event of any such termination, the Secretary of the Company will automatically become the successor Escrow Agent unless the Company appoints another successor Escrow Agent, and Purchaser hereby confirms the appointment of such successor as Purchaser's attorney-in-fact and agent to the full extent of your appointment.

12. If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto will join in furnishing such instruments.

13. It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute has been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you will be under no duty whatsoever to institute or defend any such proceedings.

14. All notices required or permitted hereunder will be in writing and will be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient, and if not during normal business hours of the recipient, then on the next business day, (c) five (5) calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications will be sent to the other party hereto at such party's address set forth below, or at such other address as such party may designate by ten (10) days advance written notice to the other party hereto.

Company: Olema Pharmaceuticals, Inc.
512 2nd Street, 4th Floor
San Francisco, California 95107
Attn: Chief Executive Officer

Purchaser: _____

Escrow Agent: Olema Pharmaceuticals, Inc.
512 2nd Street, 4th Floor
San Francisco, California 95107
Attn: Secretary

15. By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions; you do not become a party to the Agreement.

16. You are entitled to employ such legal counsel and other experts (including, without limitation, the firm of Cooley LLP) as you may deem necessary properly to advise you in connection with your obligations hereunder. You may rely upon the advice of such counsel, and you may pay such counsel reasonable compensation therefor. The Company is responsible for all fees generated by such legal counsel in connection with your obligations hereunder.

17. This instrument is binding upon and inures to the benefit of the parties hereto and their respective successors and permitted assigns. It is understood and agreed that references to "you" and "your" herein refer to the original Escrow Agents and to any and all successor Escrow Agents. It is understood and agreed that the Company may at any time or from time to time assign its rights under the Agreement and these Joint Escrow Instructions in whole or in part.

[Remainder of page intentionally left blank]

18. These Joint Escrow Instructions are governed by and interpreted and determined in accordance with the laws of the State of Delaware, as such laws are applied by Delaware courts to contracts made and to be performed entirely in Delaware by residents of that state. The parties hereby expressly consent to the personal jurisdiction of the state and federal courts located in the county in which the Company has its principal offices for any lawsuit arising from or related to this Agreement.

Very truly yours,

COMPANY:

Olema Pharmaceuticals, Inc.

By: _____

Name: _____

Title: _____

PURCHASER:

(Signature)

Name (Please Print)

Escrow Agent:

[____], Secretary

[Signature Page to Joint Escrow Instructions]

EXHIBIT D
83(b) ELECTION

OLEMA PHARMACEUTICALS, INC.
NOTICE OF GRANT OF RESTRICTED STOCK

The Participant has been granted an award (the "**Award**") of certain shares of Stock (the "**Shares**") of Olema Pharmaceuticals, Inc., a Delaware corporation, pursuant to the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the "**Plan**"), as follows:

Participant:

Date of Grant:

Total Number of Shares:

Fair Market Per Share on Date of Grant:

Initial Vesting Date:

Vested Shares:

Except as provided in the Restricted Stock Agreement, the number of Vested Shares (disregarding any resulting fractional share) as of any date, in each case contingent upon Participant's Continuous Service, is determined by multiplying the Total Number of Shares by the "**Vested Ratio**" determined as of such date as follows:

Vested Ratio

Prior to Initial Vesting Date

On Initial Vesting Date, provided the Participant's Service has not terminated prior to such date

Plus

For each additional full month of the Participant's continuous Service from Initial Vesting Date until the Vested Ratio equals 1/1, an additional

By their signatures below, the Company and the Participant agree that the Award is governed by this Grant Notice and by the provisions of the Plan and the Restricted Stock Agreement, both of which are attached to and made a part of this document. The Participant acknowledges receipt of copies of the Plan and the Restricted Stock Agreement, represents that the Participant has read and is familiar with their provisions, and hereby accepts the Award subject to all of their terms and conditions.

Olema Pharmaceuticals, Inc.

PARTICIPANT:

By: _____

Signature

Name & Title:

Date:

512 2nd Street, 4th Floor

Address:

San Francisco, CA 94107

ATTACHMENTS: 2014 Stock Plan, as amended to the Date of Grant; Restricted Stock Agreement, Assignment Separate from Certificate and form of Section 83(b) Election

THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

**OLEMA PHARMACEUTICALS, INC.
RESTRICTED STOCK AGREEMENT**

Olema Pharmaceuticals, Inc., a Delaware corporation has granted to the Participant named in the *Notice of Grant of Restricted Stock* (the “**Grant Notice**”) to which this Restricted Stock Agreement (the “**Agreement**”) is attached an Award consisting of Shares subject to the terms and conditions set forth in the Grant Notice and this Agreement. The Award has been granted pursuant to and shall in all respects be subject to the terms and conditions of the Olema Pharmaceuticals, Inc. 2014 Stock Plan (the “**Plan**”), as amended to the Date of Grant, the provisions of which are incorporated herein by reference. By signing the Grant Notice, the Participant: (a) acknowledges receipt of, and represents that the Participant has read and is familiar with, the Grant Notice, this Agreement and the Plan, (b) accepts the Award subject to all of the terms and conditions of the Grant Notice, this Agreement and the Plan, and (c) agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under the Grant Notice, this Agreement or the Plan.

1. **DEFINITIONS AND CONSTRUCTION.**

1.1 **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Grant Notice or the Plan.

1.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of this Agreement. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term “**or**” is not intended to be exclusive, unless the context clearly requires otherwise.

2. **TAX MATTERS.**

2.1 **Election under Section 83(b) of the Code.** The Participant understands that Section 83 of the Code taxes as ordinary income the difference between the amount paid for the Shares, if anything, and the fair market value of the Shares as of the date on which the Shares are “substantially vested,” within the meaning of Section 83. In this context, “substantially vested” means that the right of the Company to reacquire the Shares pursuant to the Company Reacquisition Right has lapsed. The Participant understands that he or she may elect to have his or her taxable income determined at the time he or she acquires the Shares rather than when and as the Company Reacquisition Right lapses by filing an election under Section 83(b) of the Code with the Internal Revenue Service no later than thirty (30) days after the date of acquisition of the Shares. The Participant understands that failure to make a timely filing under Section 83(b) will result in his or her recognition of ordinary income, as the Company Reacquisition Right lapses, on the difference between the purchase price, if anything, and the fair market value of the Shares at the time such restrictions lapse. The Participant further understands, however, that if Shares with respect to which an election under Section 83(b) has been made are forfeited to the Company pursuant to its Company Reacquisition Right, such forfeiture will be treated as a sale on which there is realized a loss equal to the excess (if any) of the amount paid (if any) by the Participant for the forfeited Shares over the amount realized (if any) upon their forfeiture. If the Participant has paid nothing for the forfeited Shares and has received no payment upon their forfeiture, the Participant understands that he or she will be unable to recognize any loss on the forfeiture of the Shares even though the Participant incurred a tax liability by making an election under Section 83(b).

2.2 **Notice to Company.** The Participant will notify the Company in writing if the Participant files an election pursuant to Section 83(b) of the Code. The Company intends, in the event it does not receive from the Participant evidence of such filing, to claim a tax deduction for any amount which would otherwise be taxable to the Participant in the absence of such an election.

2.3 **Valuation of the Shares.**

(a) The Shares have been valued by the Company, and the Company believes this valuation represents a fair attempt at reaching an accurate appraisal of their worth. The Participant understands, however, that the Company can give no assurances that such valuation is in fact the fair market value of the Shares and that it is possible that with the benefit of hindsight, the Internal Revenue Service would successfully assert that the value of the Shares on any relevant date is greater than so determined.

(b) If the Internal Revenue Service were to succeed in a tax determination under the Code that the Shares received have a value greater than that determined by the Company, the additional value would constitute ordinary income as of the date of the Participant’s realization of income. The additional taxes (and interest) due would be payable by the Participant, and there is no provision for the Company to reimburse him or her for that tax liability, and the Participant assumes all responsibility for such potential tax liability. Under present law, in the event such additional value would represent more than twenty-five (25%) of the Participant’s gross income for the year in which the value of the Shares were taxable, the Internal Revenue Service would have six (6) years from the due date for filing the return (or the actual filing date of the return if filed thereafter) within which to assess the Participant the additional tax and interest which would then be due. The Company undertakes no obligation to inform the Participant of any change in the tax laws which may effect this Agreement or its consequences.

2.4 **Consultation with Tax Advisors.** The Participant understands that he or she should consult with his or her tax advisor regarding the advisability of filing with the IRS an election under Section 83(b) of the Code, which must be filed no later than thirty (30) days after the date of the acquisition or the Shares pursuant to this Agreement. Failure to file an election under Section 83(b), if appropriate, may result in adverse tax consequences to the Participant. The Participant acknowledges that he or she has been advised to consult with a tax advisor regarding the tax consequences to the Participant of the purchase of Shares hereunder. ANY ELECTION UNDER SECTION 83(b) THE PARTICIPANT WISHES TO MAKE MUST BE FILED NO LATER THAN 30 DAYS AFTER THE DATE ON WHICH THE PARTICIPANT ACQUIRES THE SHARES. THIS TIME PERIOD CANNOT BE EXTENDED. THE PARTICIPANT ACKNOWLEDGES THAT TIMELY FILING OF A SECTION 83(b) ELECTION IS THE PARTICIPANT’S SOLE RESPONSIBILITY, EVEN IF THE PARTICIPANT REQUESTS THE COMPANY OR ITS REPRESENTATIVE TO FILE SUCH ELECTION ON HIS OR HER BEHALF.

2.5 **Tax Withholding.**

(a) ***In General.*** At the time the Grant Notice is executed, or at any time thereafter as requested by a Participating Company, the Participant hereby authorizes withholding from payroll and any other amounts payable to the Participant, and otherwise agrees to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax (including any social insurance) withholding obligations of the Participating Company, if any, which arise in connection with the Award, including, without limitation, obligations arising upon (a) the transfer of Shares to the Participant, (b) the lapsing of any restriction with respect to any Shares, (c) the filing of an election to recognize tax liability, or (d) the transfer by the Participant of any Shares. The Company shall have no obligation to deliver the Shares or to release any Shares from the Escrow established pursuant to Section 8 until the tax withholding obligations of the Participating Company have been satisfied by the Participant.

(b) ***Withholding in Shares.*** The Company shall have the right, but not the obligation, to require the Participant to satisfy all or any portion of a Participating Company's tax withholding obligations by withholding a number of whole Vested Shares otherwise deliverable to the Participant or by the Participant's tender to the Company of a number of whole Vested Shares or vested shares acquired otherwise than pursuant to the Award having, in any such case, a fair market value, as determined by the Company as of the date on which the tax withholding obligations arise, not in excess of the amount of such tax withholding obligations determined by the applicable minimum statutory withholding rates.

3. **ADMINISTRATION.**

All questions of interpretation concerning the Grant Notice, this Agreement, the Plan or any other form of agreement or other document employed by the Company in the administration of the Plan or the Award shall be determined by the Board. All such determinations by the Board shall be final, binding and conclusive upon all persons having an interest in the Award, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Board in the exercise of its discretion pursuant to the Plan or the Award or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest in the Award. Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, or election which is the responsibility of or which is allocated to the Company herein, provided the Officer has apparent authority with respect to such matter, right, obligation, or election.

4. **THE AWARD.**

4.1 **Grant and Issuance of Shares.** On the Date of Grant, the Participant shall acquire and the Company shall issue, subject to the provisions of this Agreement, a number of Shares equal to the Total Number of Shares. As a condition to the issuance of the Shares, the Participant shall execute and deliver the Grant Notice to the Company, accompanied by an Assignment Separate from Certificate duly endorsed (with date and number of shares blank) in the form provided by the Company.

4.2 **No Monetary Payment Required.** The Participant is not required to make any monetary payment (other than to satisfy applicable tax withholding, if any, with respect to the issuance or vesting of the Shares) as a condition to receiving the Shares, the consideration for which shall be past services actually rendered or future services to be rendered to a Participating Company or for its benefit. Notwithstanding the foregoing, if required by applicable law, the Participant shall furnish consideration in the form of cash or past services rendered to a Participating Company or for its benefit having a value not less than the par value of the Shares issued pursuant to the Award.

4.3 **Beneficial Ownership of Shares; Certificate Registration.** The Participant hereby authorizes the Company, in its sole discretion, to deposit the Shares with the Company's transfer agent, including any successor transfer agent, to be held in book entry form during the term of the Escrow pursuant to Section 8. Furthermore, the Participant hereby authorizes the Company, in its sole discretion, to deposit, following the term of such Escrow, for the benefit of the Participant with any broker with which the Participant has an account relationship of which the Company has notice any or all Shares which are no longer subject to such Escrow. Except as provided by the foregoing, a certificate for the Shares shall be registered in the name of the Participant, or, if applicable, in the names of the heirs of the Participant.

4.4 **Issuance of Shares in Compliance with Law.** The issuance of Shares shall be subject to compliance with all applicable requirements of federal, state or foreign law with respect to such securities. No Shares shall be issued hereunder if their issuance would constitute a violation of any applicable federal, state or foreign securities laws or other law or regulations or the requirements of any stock exchange or market system upon which the Stock may then be listed. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any Shares shall relieve the Company of any liability in respect of the failure to issue such Shares as to which such requisite authority shall not have been obtained. As a condition to the issuance of the Shares, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

5. **VESTING OF SHARES.**

Shares acquired pursuant to this Agreement shall become Vested Shares as provided in the Grant Notice. For purposes of determining the number of Vested Shares following an Ownership Change Event, credited Service shall include all Service with any corporation which is a Participating Company at the time the Service is rendered, whether or not such corporation is a Participating Company both before and after the Ownership Change Event.

6. COMPANY REACQUISITION RIGHT.

6.1 **Grant of Company Reacquisition Right.** In the event that (a) the Participant's Service terminates for any reason or no reason, with or without cause, or, (b) the Participant, the Participant's legal representative, or other holder of the Shares, attempts to sell, exchange, transfer, pledge, or otherwise dispose of (other than pursuant to an Ownership Change Event), including, without limitation, any transfer to a nominee or agent of the Participant, any Shares which are not Vested Shares ("**Unvested Shares**"), the Participant shall forfeit and the Company shall automatically reacquire the Unvested Shares, and the Participant shall not be entitled to any payment therefor (the "**Company Reacquisition Right**").

6.2 **Ownership Change Event, Dividends, Distributions and Adjustments.** Upon the occurrence of an Ownership Change Event, a dividend or distribution to the stockholders of the Company paid in shares of Stock or other property, or any other adjustment upon a change in the capital structure of the Company as described in Section 10, any and all new, substituted or additional securities or other property (other than regular, periodic dividends paid on Stock pursuant to the Company's dividend policy) to which the Participant is entitled by reason of the Participant's ownership of Unvested Shares shall be immediately subject to the Company Reacquisition Right and included in the terms "**Shares**," "**Stock**" and "**Unvested Shares**" for all purposes of the Company Reacquisition Right with the same force and effect as the Unvested Shares immediately prior to the Ownership Change Event, dividend, distribution or adjustment, as the case may be. For purposes of determining the number of Vested Shares following an Ownership Change Event, dividend, distribution or adjustment, credited Service shall include all Service with any corporation which is a Participating Company at the time the Service is rendered, whether or not such corporation is a Participating Company both before and after any such event.

7. RIGHT OF FIRST REFUSAL.

7.1 **Grant of Right of First Refusal.** Except as provided in Section 7.7 and Section 14 below, in the event the Participant, the Participant's legal representative, or other holder of shares subject to the Award proposes to sell, exchange, transfer, pledge, or otherwise dispose of any Vested Shares (the "**Transfer Shares**") to any person or entity, including, without limitation, any stockholder of a Participating Company, the Company shall have the right to repurchase the Transfer Shares under the terms and subject to the conditions set forth in this Section (the "**Right of First Refusal**").

7.2 **Notice of Proposed Transfer.** Prior to any proposed transfer of the Transfer Shares, the Participant shall deliver written notice (the "**Transfer Notice**") to the Company describing fully the proposed transfer, including the number of Transfer Shares, the name and address of the proposed transferee (the "**Proposed Transferee**") and, if the transfer is voluntary, the proposed transfer price, and containing such information necessary to show the bona fide nature of the proposed transfer. In the event of a bona fide gift or involuntary transfer, the proposed transfer price shall be deemed to be the Fair Market Value of the Transfer Shares, as determined by the Board in good faith. If the Participant proposes to transfer any Transfer Shares to more than one Proposed Transferee, the Participant shall provide a separate Transfer Notice for the proposed transfer to each Proposed Transferee. The Transfer Notice shall be signed by both the Participant and the Proposed Transferee and must constitute a binding commitment of the Participant and the Proposed Transferee for the transfer of the Transfer Shares to the Proposed Transferee subject only to the Right of First Refusal.

7.3 **Bona Fide Transfer.** If the Company determines that the information provided by the Participant in the Transfer Notice is insufficient to establish the bona fide nature of a proposed voluntary transfer, the Company shall give the Participant written notice of the Participant's failure to comply with the procedure described in this Section 7, and the Participant shall have no right to transfer the Transfer Shares without first complying with the procedure described in this Section 7. The Participant shall not be permitted to transfer the Transfer Shares if the proposed transfer is not bona fide.

7.4 **Exercise of Right of First Refusal.** If the Company determines the proposed transfer to be bona fide, the Company shall have the right to purchase all, but not less than all, of the Transfer Shares (except as the Company and the Participant otherwise agree) at the purchase price and on the terms set forth in the Transfer Notice by delivery to the Participant of a notice of exercise of the Right of First Refusal within thirty (30) days after the date the Transfer Notice is delivered to the Company. The Company's exercise or failure to exercise the Right of First Refusal with respect to any proposed transfer described in a Transfer Notice shall not affect the Company's right to exercise the Right of First Refusal with respect to any proposed transfer described in any other Transfer Notice, whether or not such other Transfer Notice is issued by the Participant or issued by a person other than the Participant with respect to a proposed transfer to the same Proposed Transferee. If the Company exercises the Right of First Refusal, the Company and the Participant shall thereupon consummate the sale of the Transfer Shares to the Company on the terms set forth in the Transfer Notice within sixty (60) days after the date the Transfer Notice is delivered to the Company (unless a longer period is offered by the Proposed Transferee); provided, however, that in the event the Transfer Notice provides for the payment for the Transfer Shares other than in cash, the Company shall have the option of paying for the Transfer Shares by the present value cash equivalent of the consideration described in the Transfer Notice as reasonably determined by the Company. For purposes of the foregoing, cancellation of any indebtedness of the Participant to any Participating Company shall be treated as payment to the Participant in cash to the extent of the unpaid principal and any accrued interest canceled. Notwithstanding anything contained in this Section to the contrary, the period during which the Company may exercise the Right of First Refusal and consummate the purchase of the Transfer Shares from the Participant shall terminate no sooner than the completion of a period of eight (8) months following the date on which the Participant acquired the Transfer Shares.

7.5 **Failure to Exercise Right of First Refusal.** If the Company fails to exercise the Right of First Refusal in full (or to such lesser extent as the Company and the Participant otherwise agree) within the period specified in Section 7.4, the Participant may conclude a transfer to the Proposed Transferee of the Transfer Shares on the terms and conditions described in the Transfer Notice, provided such transfer occurs not later than ninety (90) days following delivery to the Company of the Transfer Notice or, if applicable, following the end of the period described in the last sentence of Section 7.4. The Company shall have the right to demand further assurances from the Participant and the Proposed Transferee (in a form satisfactory to the Company) that the transfer of the Transfer Shares was actually carried out on the terms and conditions described in the Transfer Notice. No Transfer Shares shall be transferred on the books of the Company until the Company has received such assurances, if so demanded, and has approved the proposed transfer as bona fide. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by the Participant, shall again be subject to the Right of First Refusal and shall require compliance by the Participant with the procedure described in this Section.

7.6 **Transferees of Transfer Shares.** All transferees of the Transfer Shares or any interest therein, other than the Company, shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold such Transfer Shares or interest therein subject to all of the terms and conditions of this Agreement, including this Section 7 providing for the Right of First Refusal with respect to any subsequent transfer. Any sale or transfer of any Shares shall be void unless the provisions of this Section are met.

7.7 **Transfers Not Subject to Right of First Refusal.** The Right of First Refusal shall not apply to any transfer or exchange of the Shares if such transfer or exchange is in connection with an Ownership Change Event. If the consideration received pursuant to such transfer or exchange consists of stock of a Participating Company, such consideration shall remain subject to the Right of First Refusal unless the provisions of Section 7.9 result in a termination of the Right of First Refusal.

7.8 **Assignment of Right of First Refusal.** The Company shall have the right to assign the Right of First Refusal at any time, whether or not there has been an attempted transfer, to one or more persons as may be selected by the Company.

7.9 **Early Termination of Right of First Refusal.** The other provisions of this Agreement notwithstanding, the Right of First Refusal shall terminate and be of no further force and effect upon (a) the occurrence of a Change in Control, unless the Acquiror assumes the Company's rights and obligations under this Agreement, or (b) the existence of a public market for the class of shares subject to the Right of First Refusal. A "**public market**" shall be deemed to exist if (i) such stock is listed on a national securities exchange (as that term is used in the Exchange Act) or (ii) such stock is traded on the over-the-counter market and prices therefor are published daily on business days in a recognized financial journal.

8. **ESCROW.**

8.1 **Appointment of Agent.** To ensure that Shares subject to the Company Recquisition Right will be available for reacquisition, the Participant and the Company hereby appoint the Secretary of the Company, or any other person designated by the Company, as their agent and as attorney-in-fact for the Participant (the "**Agent**") to hold any and all Unvested Shares and to sell, assign and transfer to the Company any such Unvested Shares reacquired by the Company pursuant to the Company Recquisition Right. The Participant understands that appointment of the Agent is a material inducement to make this Agreement and that such appointment is coupled with an interest and is irrevocable. The Agent shall not be personally liable for any act the Agent may do or omit to do hereunder as escrow agent, agent for the Company, or attorney in fact for the Participant while acting in good faith and in the exercise of the Agent's own good judgment, and any act done or omitted by the Agent pursuant to the advice of the Agent's own attorneys shall be conclusive evidence of such good faith. The Agent may rely upon any letter, notice or other document executed by any signature purporting to be genuine and may resign at any time.

8.2 **Establishment of Escrow.** The Participant authorizes the Company to deposit the Unvested Shares with the Company's transfer agent to be held in book entry form, as provided by Section 4.3, and the Participant agrees to deliver to and deposit with the Agent each certificate, if any, evidencing the Shares and an Assignment Separate from Certificate with respect to such book entry shares and each such certificate duly endorsed (with date and number of Shares blank) in the form attached to this Agreement, to be held by the Agent under the terms and conditions of this Section (the "**Escrow**"). Upon the occurrence of an Ownership Change Event, a dividend or distribution to the stockholders of the Company paid in shares of Stock or other property (other than regular, periodic dividends paid on Stock pursuant to the Company's dividend policy), or any other adjustment upon a change in the capital structure of the Company, as described in Section 10, any and all new, substituted or additional securities or other property to which the Participant is entitled by reason of his or her ownership of the Shares that remain, following such Ownership Change Event, dividend, distribution or change described in Section 10, subject to the Company Reacquisition Right shall be immediately subject to the Escrow to the same extent as the Shares immediately before such event. The Company shall bear the expenses of the Escrow.

8.3 **Delivery of Shares to Participant.** The Escrow shall continue with respect to any Shares for so long as such Shares remain subject to the Company Reacquisition Right. Upon termination of the Company Reacquisition Right with respect to Shares, the Company shall so notify the Agent and direct the Agent to deliver such number of Shares to the Participant. As soon as practicable after receipt of such notice, the Agent shall cause the Shares specified by such notice to be delivered to the Participant, and the Escrow shall terminate with respect to such Shares.

8.4 **Notices and Payments.** In the event the Shares and any other property held in escrow are subject to the Company's exercise of the Company Reacquisition Right or the Right of First Refusal, the notices required to be given to the Participant shall be given to the Agent, and any payment required to be given to the Participant shall be given to the Agent. Within thirty (30) days after payment by the Company, the Agent shall deliver the Shares and any other property which the Company has purchased to the Company and shall deliver the payment received from the Company to the Participant.

9. **EFFECT OF CHANGE IN CONTROL.**

In the event of a Change in Control, except to the extent that the Board determines to settle the Award in accordance with Section 9.1(c) of the Plan, the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of the Participant, assume or continue in full force and effect the Company's rights and obligations under the Award or substitute for the Award a substantially equivalent award for the Acquiror's stock. For purposes of this Section, the Award shall be deemed assumed if, following the Change in Control, the Award confers the right to receive, subject to the terms and conditions of the Plan and this Agreement, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a holder of a share of Stock on the effective date of the Change in Control was entitled. Notwithstanding the foregoing, Shares acquired pursuant to the Award prior to the Change in Control and any consideration received pursuant to the Change in Control with respect to such shares shall continue to be subject to all applicable provisions of this Agreement except as otherwise provided herein.

10. ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE.

Subject to any required action by the stockholders of the Company, in the event of any change in the Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Stock (excepting regular, periodic cash dividends) that has a material effect on the Fair Market Value of shares of Stock, appropriate and proportionate adjustments shall be made in the number and kind of shares of stock or other property subject to the Award, in order to prevent dilution or enlargement of the Participant's rights under the Award. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "effected without receipt of consideration by the Company." Any and all new, substituted or additional securities or other property to which Participant is entitled by reason of ownership of Shares acquired pursuant to this Award will be immediately subject to the provisions of this Award on the same basis as all Shares originally acquired hereunder. Any fractional share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

11. RIGHTS AS A STOCKHOLDER, DIRECTOR, EMPLOYEE OR CONSULTANT.

The Participant shall have no rights as a stockholder with respect to any Shares subject to the Award until the date of the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date the Shares are issued, except as provided in Section 10. Subject to the provisions of this Agreement, the Participant shall exercise all rights and privileges of a stockholder of the Company with respect to Shares deposited in the Escrow pursuant to Section 8. If the Participant is an Employee, the Participant understands and acknowledges that, except as otherwise provided in a separate, written employment agreement between a Participating Company and the Participant, the Participant's employment is "at will" and is for no specified term. Nothing in this Agreement shall confer upon the Participant any right to continue in the Service of a Participating Company or interfere in any way with any right of the Participating Company Group to terminate the Participant's Service, as the case may be, at any time.

12. **LEGENDS.**

The Company may at any time place legends referencing the Company Reacquisition Right, Right of First Refusal and any applicable federal, state or foreign securities law restrictions on all certificates representing Shares. The Participant shall, at the request of the Company, promptly present to the Company any and all certificates representing Shares in the possession of the Participant in order to carry out the provisions of this Section. Unless otherwise specified by the Company, legends placed on such certificates may include, but shall not be limited to, the following:

12.1 “THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED OR HYPOTHECATED UNLESS THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT COVERING SUCH SECURITIES, THE SALE IS MADE IN ACCORDANCE WITH RULE 144 OR RULE 701 UNDER THE ACT, OR THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY, STATING THAT SUCH SALE, TRANSFER, ASSIGNMENT OR HYPOTHECATION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SUCH ACT.”

12.2 “THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND REPURCHASE OPTIONS IN FAVOR OF THE CORPORATION OR ITS ASSIGNEE SET FORTH IN AN AGREEMENT BETWEEN THE CORPORATION AND THE REGISTERED HOLDER, OR SUCH HOLDER’S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS CORPORATION.”

13. **LOCK-UP AGREEMENT.**

The Participant hereby agrees that in the event of any underwritten public offering of stock, including an initial public offering of stock, made by the Company pursuant to an effective registration statement filed under the Securities Act, the Participant shall not offer, sell, contract to sell, pledge, hypothecate, grant any option to purchase or make any short sale of, or otherwise dispose of any shares of stock of the Company or any rights to acquire stock of the Company for such period of time from and after the effective date of such registration statement as may be established by the underwriter for such public offering; provided, however, that such period of time shall not exceed one hundred eighty (180) days from the effective date of the registration statement to be filed in connection with such public offering; provided, further, however, that such one hundred eighty (180) day period may be extended for an additional period, not to exceed twenty (20) days, upon the request of the Company or the underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The foregoing limitation shall not apply to shares registered in the public offering under the Securities Act. The Participant hereby agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing within a reasonable timeframe if so requested by the Company.

14. **TRANSFERS IN VIOLATION OF AGREEMENT.**

No Shares may be sold, exchanged, transferred, assigned, pledged, hypothecated or otherwise disposed of, including by operation of law, in any manner which violates any of the provisions of this Agreement and, except pursuant to an Ownership Change Event, until the date on which such shares become Vested Shares, and any such attempted disposition shall be void. The Company shall not be required (a) to transfer on its books any Shares which will have been transferred in violation of any of the provisions set forth in this Agreement or (b) to treat as owner of such Shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such Shares will have been so transferred. In order to enforce its rights under this Section, the Company shall be authorized to give a stop transfer instruction with respect to the Shares to the Company's transfer agent.

15. **MISCELLANEOUS PROVISIONS.**

15.1 **Termination or Amendment.** The Board may terminate or amend the Plan or this Agreement at any time; provided, however, that no such termination or amendment may adversely affect the Participant's rights under this Agreement without the consent of the Participant, unless such termination or amendment is necessary to comply with any applicable law or government regulation. No amendment or addition to this Agreement shall be effective unless in writing.

15.2 **Nontransferability of the Award.** The right to acquire Shares pursuant to the Award shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. All rights with respect to the Award shall be exercisable during the Participant's lifetime only by the Participant or the Participant's guardian or legal representative.

15.3 **Further Instruments.** The parties hereto agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.

15.4 **Binding Effect.** This Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer set forth herein, be binding upon the Participant and the Participant's heirs, executors, administrators, successors and assigns.

15.5 **Delivery of Documents and Notices.** Any document relating to participation in the Plan, or any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given (except to the extent that this Agreement provides for effectiveness only upon actual receipt of such notice) upon personal delivery, electronic delivery at the e-mail address, if any, provided for the Participant by a Participating Company, or upon deposit in the U.S. Post Office or foreign postal service, by registered or certified mail, or with a nationally recognized overnight courier service, with postage and fees prepaid, addressed to the other party at the address of such party set forth in the Grant Notice or at such other address as such party may designate in writing from time to time to the other party.

(a) **Description of Electronic Delivery.** The Plan documents, which may include but do not necessarily include: the Plan, the Grant Notice, this Agreement, and any reports of the Company provided generally to the Company's stockholders, may be delivered to the Participant electronically. In addition, if permitted by the Company, the Participant may deliver electronically the Grant Notice to the Company or to such third party involved in administering the Plan as the Company may designate from time to time. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company.

(b) **Consent to Electronic Delivery.** The Participant acknowledges that the Participant has read Section 15.5(a) of this Agreement and consents to the electronic delivery of the Plan documents and, if permitted by the Company, the delivery of the Grant Notice and notices in connection with the Escrow, as described in Section 15.5(a). The Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to the Participant by contacting the Company by telephone or in writing. The Participant further acknowledges that the Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, the Participant understands that the Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. The Participant may revoke his or her consent to the electronic delivery of documents described in Section 15.5(a) or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Finally, the Participant understands that he or she is not required to consent to electronic delivery of documents described in Section 15.5(a).

15.6 **Integrated Agreement.** The Grant Notice, this Agreement and the Plan, together with any employment, service or other agreement between the Participant and a Participating Company referring to the Award, shall constitute the entire understanding and agreement of the Participant and the Participating Company Group with respect to the subject matter contained herein or therein and supersede any prior agreements, understandings, restrictions, representations, or warranties among the Participant and the Participating Company Group with respect to such subject matter. To the extent contemplated herein or therein, the provisions of the Grant Notice, this Agreement and the Plan shall survive any settlement of the Award and shall remain in full force and effect.

15.7 **Applicable Law.** The Agreement shall be governed by the laws of the State of Delaware as such laws are applied to agreements between Delaware residents entered into and to be performed entirely within the State of Delaware.

15.8 **Counterparts.** The Grant Notice may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED the undersigned does hereby sell, assign and transfer unto

_____ (_____) shares of the Capital Stock of Olema Pharmaceuticals, Inc., a Delaware corporation, standing in the undersigned's name on the books of said corporation represented by Certificate No. _____ herewith and does hereby irrevocably constitute and appoint _____ Attorney to transfer the said stock on the books of said corporation with full power of substitution in the premises.

Dated: _____

Signature

Print Name

Instructions: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Company to exercise its Company Reacquisition Right set forth in the Restricted Stock Agreement without requiring additional signatures on the part of the Participant.

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (the "Agreement") is made and entered into as of _____ between Olema Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and _____ ("Indemnitee").

WITNESSETH THAT:

WHEREAS, highly competent persons have become more reluctant to serve corporations as directors, officers or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. The Bylaws and Certificate of Incorporation of the Company require indemnification of the officers and directors of the Company. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("DGCL"). The Bylaws and Certificate of Incorporation 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, officers and other persons with respect to indemnification;

WHEREAS, the uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

WHEREAS, the Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

WHEREAS, it is reasonable, prudent and necessary 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 so that they will serve or 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 Bylaws and Certificate of Incorporation of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder;

WHEREAS, Indemnitee does not regard the protection available under the Company's Bylaws and Certificate of Incorporation and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he or she be so indemnified; and

[WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by _____ (“Fund”), which Indemnitee and Fund intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgement and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board.]

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as an officer or director from and after the date hereof, the parties hereto agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of his or her Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him, or on his or her behalf, in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his or her Corporate Status, the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee, or on the Indemnitee's behalf, in connection with such Proceeding if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his or her Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he or she shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, 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 him or on his behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section 1 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.

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf if, by reason of his Corporate Status, he or she is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

3. Contribution.

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction or events from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the transaction or events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations that applicable law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution that may be brought by officers, directors, or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) 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 claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause 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 transaction(s).

4. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a witness, or is made (or asked) to respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he or she shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.

5. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee 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 Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

6. Procedures and Presumptions for Determination of Entitlement to Indemnification. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board (1) by a majority vote of the disinterested directors, even though less than a quorum, (2) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum, (3) if there are no disinterested directors or if the disinterested directors so direct, by independent legal counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee, or (4) if so directed by the Board, by the stockholders of the Company. 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 by Indemnitee.

(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board. Indemnitee may, within ten (10) days after such written notice of selection shall have been given, deliver to the Company 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 13 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 a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within twenty (20) days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection that shall have been made by the Indemnitee to the Company's 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, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or independent legal counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or independent legal counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise (as hereinafter defined), including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the 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 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times 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. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) If the person, persons or entity empowered or selected under Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification 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; provided, however, that such sixty (60) day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding the Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination 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.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of 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 that 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 conduct was unlawful.

7. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within ninety (90) days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor, or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within one hundred eighty (180) days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b).

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by him in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefore) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(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.

8. Non-Exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.

(a) The rights of indemnification 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 Certificate of Incorporation, the By-laws, any agreement, a vote of stockholders, a resolution of directors of the Company, 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 Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Certificate of Incorporation, By-laws 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, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, 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 director, officer, employee, agent or fiduciary 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 directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding 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.

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by Fund 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 Certificate of Incorporation or Bylaws of the Company (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 8(c).]

(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 shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(f) Except as provided in paragraph (c) above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

9. Exception to Right of Indemnification. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision[, provided, that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors set forth in Section 8(c) above]; or

(b) 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 Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law; or

(c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation, or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

10. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is an officer or director of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 7 hereof) by reason of his Corporate Status, whether or not he or she is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.

11. Security. To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of the Indemnitee.

12. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or 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.

(c) The Company shall not seek from a court, or agree to, a "bar order" that would have the effect of prohibiting or limiting the Indemnitee's rights to receive advancement of expenses under this Agreement.

13. Definitions. For purposes of this Agreement:

(a) "Corporate Status" describes the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(b) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) "Enterprise" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) “Expenses” shall include all reasonable attorneys’ fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(e) “Independent Counsel” means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), 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 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.

(f) “Proceeding” includes 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 by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of his or her Corporate Status, by reason of any action taken by him or of any inaction on his part while acting in his or her Corporate Status; in each case whether or not he or she is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce his rights under this Agreement.

14. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

15. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter that may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation that it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

17. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee signature hereto.

(b) To the Company at:

Olema Pharmaceuticals, Inc.
512 2nd Street, 4th Floor
San Francisco, CA 94107
Attention: Chief Executive Officer

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

18. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

19. 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.

20. Governing 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. 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 Chancery Court of the State of Delaware (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) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (iv) 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.

Signature Page To Follow

IN WITNESS WHEREOF, the parties hereto have executed this Indemnification Agreement on and as of the day and year first above written.

COMPANY

OLEMA PHARMACEUTICALS, INC.

By: _____
Name:
Title:

INDEMNITEE

Name:
Address:
Electronic Mail:

SIGNATURE PAGE
INDEMNIFICATION AGREEMENT
