As filed with the Securities and Exchange Commission on March 8, 2021.

Registration No. 333-253329

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

AMENDMENT NO. 1
TO
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Longboard Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	2834	84-5009619
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

6154 Nancy Ridge Drive
San Diego, California 92121
(619) 592-9775
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Kevin R. Lind
President and Chief Executive Officer
Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121
(619) 592-9775
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Steven M. Przesmicki Charles S. Kim Asa M. Henin Cooley LLP 4401 Eastgate Mall San Diego, California 92121 (858) 550-6000	Cheston J. Larson Matthew T. Bush Chris G. Geissinger Latham & Watkins LLP 12670 High Bluff Drive San Diego, California 92130 (858) 523-5400

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered[(1)]	Proposed Maximum Offering Price Per Share[(2)]	Proposed Maximum Aggregate Offering Price[(1)(2)]	Amount of Registration Fee[(3)]
Common stock, par value $0.0001 per share	5,750,000	$16.00	$92,000,000	$10,038

(1) Includes 750,000 shares that the underwriters have the option to purchase.
(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(a) of the Securities Act of 1933, as amended.
(3) The registrant previously paid $9,410.

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.

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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 MARCH 8, 2021

5,000,000 Shares

Longboard Pharmaceuticals, Inc.

Common Stock

$ per share

This is the initial public offering of our common stock. We are selling 5,000,000 shares of our common stock. We expect the initial public offering price to be between $14.00 and $16.00 per share. After pricing of the offering, we expect to list our common stock on the Nasdaq Global Market under the symbol "LBPH."

We have granted the underwriters the option to purchase up to an additional 750,000 shares of our common stock.

We are an "emerging growth company" as defined by the Jumpstart Our Business Startups Act of 2012, and as such, have elected to comply with reduced public company reporting requirements for this prospectus and may elect to comply with reduced public company reporting requirements in future filings.

We have two classes of common stock: the voting common stock offered hereby and non-voting common stock. The rights of the holders of common stock and non-voting common stock are identical, except with respect to voting and conversion. Each share of common stock is entitled to one vote and is not convertible into any other class of our share capital. Shares of non-voting common stock are non-voting, except as may be required by law. Each share of non-voting common stock may be converted at any time into one share of common stock at the option of its holder, subject to the beneficial ownership limitations provided for in our amended and restated certificate of incorporation. See "Description of Capital Stock" on page 156 of this prospectus for more information on the rights of the holders of our common stock and non-voting common stock. We are offering voting common stock in this offering, and unless otherwise noted, all references in this prospectus to our "common stock" refers to our voting common stock.

Investing in our common stock involves risks. See "Risk Factors" section 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.

	Per Share	Total
Public Offering Price	$	$
Underwriting Discount[(1)]	$	$
Proceeds to Longboard Pharmaceuticals, Inc. (before expenses)	$	$

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

The underwriters expect to deliver the shares of common stock to purchasers against payment on or about , 2021 through the book entry facilities of The Depository Trust Company.

Citigroup **Evercore ISI** **Guggenheim Securities** **Cantor**

, 2021

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We are responsible for the information contained in this prospectus and in any free writing prospectus we prepare or authorize. We have not authorized anyone to provide you with different information, and we take no responsibility for any other information others may give you. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, 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 not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus.

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.

This prospectus includes our trademarks and the trademarks and trade names of other organizations. Solely for convenience, trademarks and trade names referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUMMARY

This summary highlights 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 entitled "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 "Longboard," the "company," "we," "our," "us" or similar terms refer to Longboard Pharmaceuticals, Inc.

Overview

We are a clinical-stage biopharmaceutical company focused on developing novel, transformative medicines for neurological diseases. We were formed in January 2020 by Arena Pharmaceuticals, Inc. (Arena) to advance a portfolio of centrally acting product candidates designed to be highly selective for specific G protein-coupled receptors (GPCRs). Our small molecule product candidates were discovered out of the same platform at Arena that represents a culmination of more than 20 years of GPCR research. Our pipeline includes:

- LP352, an oral, centrally acting, 5-hydroxytryptamine 2c receptor subtype (5-HT2c) superagonist, that we are advancing in a multiple-ascending dose (MAD) portion of a Phase 1 clinical trial and expect to initiate a Phase 1b/2a clinical trial for the treatment of developmental and epileptic encephalopathies (DEEs), including Dravet syndrome and Lennox-Gastaut syndrome, among others, in the first quarter of 2022;
- LP143, a centrally acting, full cannabinoid type 2 receptor (CB2) agonist in investigational new drug application (IND)-enabling studies for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including amyotrophic lateral sclerosis (ALS); and
- LP659, a centrally acting, sphingosine-1-phosphate (S1P) receptor subtypes 1 and 5 (S1P1,5) modulator in IND-enabling studies for central nervous system (CNS) neuroinflammatory diseases.

We also have additional earlier discovery stage compounds.

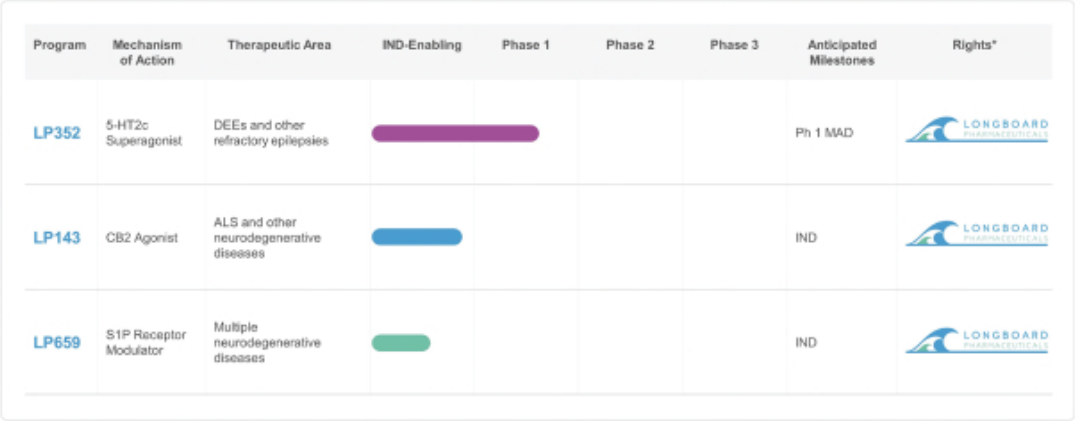
LP352, our most advanced product candidate, is an oral, centrally acting, 5-HT2c superagonist with negligible observed impact on 5-HT2b and 5-HT2a receptor subtypes in our preclinical studies to date. 5-HT2b and 5-HT2a receptor agonism have been associated with significant adverse side effects, including valvular heart disease and pulmonary arterial hypertension in the case of the 5-HT2b receptor, and hallucinations and mild to severe anxiety in the case of the 5-H2Ta receptor. LP352 has the potential to be a clinically differentiated 5-HT2c superagonist for patients with DEEs, a group of severe early-childhood onset epilepsies characterized by refractory seizures and developmental delay or regression. Certain compounds in the 5-HT2c agonist class have been shown to produce clinical benefit in epilepsy patients, although the side effect profiles of available non-selective 5-HT2 therapies may limit their use due to their activity on receptor subtypes 5-HT2b and 5-HT2a. Fenfluramine, marketed as FINTEPLA, a non-specific 5-HT2 agonist, was recently approved for the treatment of seizures associated with Dravet syndrome by the U.S. Food and Drug Administration (FDA). Fenfluramine has been associated with significant side effects and FINTEPLA has a Risk Evaluation and Mitigation Strategy (REMS) program requirement and a boxed warning. Another 5-HT2c agonist, lorcaserin, is also under evaluation for its potential to reduce seizures in patients with Dravet syndrome and refractory epilepsies. Lorcaserin was discovered by Arena and approved by the FDA for chronic weight management, marketed as BELVIQ by Eisai Inc. and Eisai Co. Ltd. (collectively, Eisai), and withdrawn from the market at the request of the FDA based on a change in the FDA's risk-benefit assessment for the approved indication. However, the FDA authorized an expanded access program for patients with Dravet syndrome and other refractory epilepsies to continue to

receive lorcaserin. An expanded access program allows patients with an immediately life-threatening condition or serious disease or condition to gain access to an investigational medical product for treatment outside of clinical trials when no comparable or satisfactory alternative therapy options are available. LP352 was designed and developed by Arena to be the next generation to lorcaserin, with the goal of being a safer and more effective 5-HT2c agonist. We believe LP352's potential for high selectivity and novel chemistry may reduce seizures in DEE patients and overcome the known or perceived safety limitations of available drugs in the 5-HT2 class. In the completed single-ascending dose (SAD) portion of the Phase 1 clinical trial, there were no unexpected adverse events (AEs) observed and no cases of serious adverse events (SAEs) reported.

We are also developing LP143, a CB2 agonist that showed 1,000 times greater selectivity for CB2 than CB1 in preclinical studies, and LP659, a S1P1,5 receptor agonist. Based on their novel chemistry, potential for high selectivity for specific subtypes of GPCRs and favorable blood-brain-barrier penetration, we believe these compounds have the potential to address microglial neuroinflammation, which may drive disease progression in a range of neurodegenerative diseases. LP143 and LP659 were designed by Arena to have more optimized pharmacology and pharmacokinetics (PK) for their intended GPCR targets, including GPCR subtypes, compared to other known compounds. We believe this potential selectivity and specificity could result in superior profiles in the clinic compared to drugs that may not fully engage the intended GPCR target, may cause off-target activity, or may be associated with other undesirable effects. LP143 is a centrally acting, full CB2 agonist being developed for the treatment of neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including ALS. CB2 agonism has been shown in studies to regulate neuroinflammatory processes, including microglial activation, reducing the amount of damage characteristic of degeneration. LP659 is a centrally acting, S1P1,5 receptor modulator for which aberrant modulation has been shown to be involved in a wide range of neurodegenerative diseases.

Our Pipeline

The following table provides an overview of our current programs:



* We hold worldwide rights to our product candidates in our therapeutic areas of focus for such compounds through the Arena License Agreement, which is defined and described below.

LP352

We are developing LP352, an oral, centrally acting, 5-HT2c superagonist for DEEs and other epileptic disorders. DEEs are a group of severe early-childhood onset epilepsies characterized by refractory seizures and developmental delay or regression. These diseases are often progressive and resistant to treatment. DEEs encompass a diverse range of etiologies and includes Dravet syndrome and Lennox-Gastaut syndrome, among

others. Based on a 2015 U.S. incidence rate for Dravet syndrome and a 2007 incidence rate for Lennox-Gastaut syndrome, there are an estimated 21,000 patients with Dravet syndrome and 47,000 patients with Lennox-Gastaut syndrome in the United States. Based on a 2021 European Union (EU) incidence rate, there are an estimated 21,000 patients with Dravet syndrome in the EU. The number of patients with Lennox-Gastaut syndrome in the EU is less known. LP352 selectively targets the 5-HT2c receptor, which has been shown to upregulate the release of gamma-aminobutyric acid (GABA), a principal neurotransmitter in the brain. This release of GABA increases the threshold for neuronal hyperexcitability, and decreases the likelihood of seizure occurrences. We believe LP352 has the mechanistic potential to reduce the frequency of seizures in Dravet syndrome and Lennox-Gastaut syndrome, as well as a broader epilepsy population.

We are investigating LP352 in a Phase 1 clinical trial for which the SAD portion has been completed. Initial PK data from the SAD portion of the clinical trial demonstrated dose dependent PK properties with proportional increases in area under the curve (AUC) and maximum serum concentrations (Cmax). No unexpected AEs were observed and no SAEs were reported. We initiated the MAD portion of this clinical trial in February 2021, and expect to report topline data for this portion in the second half of this year. We plan to initiate a Phase 1b/2a clinical trial in the first quarter of 2022, pending authorization to proceed under an IND we intend to submit to the FDA's Division of Neurology.

LP143

We are developing LP143, a centrally acting, full CB2 agonist for neurodegenerative diseases associated with neuroinflammation caused by microglial activation. CB2 agonism has been shown in preclinical studies to regulate neuroinflammatory processes, reducing the neuronal damage characteristic of degeneration. We believe there is a strong rationale for CB2 agonism in neurodegenerative diseases, given increased CB2 expression in patients with these diseases as well as results from animal models. We see potential for a selective CB2 agonist to treat a range of neurodegenerative diseases. LP143, through its selectivity for CB2 versus the cannabinoid type 1 receptor (CB1), was designed to minimize the risk of psychoactive AEs associated with CB1 activation. Our initial focus is on ALS. Most ALS patients experience rapid disease progression and poor prognosis, with paralysis and death seen within a span of two to five years. Preclinical data have demonstrated the benefit of CB2 agonism in a mouse model of ALS, with treated mice demonstrating delays in loss of motor function and improved survival. In preclinical studies, LP143 has demonstrated 1,000-fold greater selectivity for CB2 over CB1, sustained activity over the duration of treatment, and favorable blood-brain-barrier penetration. LP143 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the first quarter of 2022.

LP659

We are developing LP659, a centrally acting, S1P1,5 receptor modulator for neurodegenerative diseases. LP659 was designed for optimized pharmacology, PK and engagement of S1P1,5, which may lead to improved efficacy and safety. LP659 was designed to avoid the negative effects connected to the receptor subtypes 2 and 3, which may be associated with more serious, off-target cardiac, pulmonary, and cancer-related effects. Aberrant S1P receptor modulation has been shown to be involved in a wide range of neurodegenerative diseases, including multiple sclerosis, lupus, Parkinson's disease and Alzheimer's disease. Preclinical data demonstrated an initial dose-dependent decrease in disease progression over 17 days in a mouse model of demyelinating disease. LP659 rapidly reduced circulating lymphocytes, which returned to baseline after its clearance. We believe LP659 has high oral bioavailability with a direct impact on CNS glial cell S1P receptors. LP659 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the second half of 2022.

Our Company History

We were established in January 2020 as Arena Neuroscience, Inc., a wholly owned subsidiary of Arena, based in San Diego, California. We changed our name to Longboard Pharmaceuticals, Inc. and launched as an

independent company in October 2020. Building on Arena's 20-year history in discovering, developing and optimizing GPCR therapies, we believe we are well positioned to execute our clinical development programs. We are initially focused on developing LP352, LP143, and LP659, which Arena designed to have distinct chemistry and therapeutic profiles from Arena's other product candidates with similar mechanisms of actions. LP352 was designed to be more specific and selective for the 5-HT2c subtype than lorcaserin. LP143 was designed to be a centrally acting agonist of CB2, while olorinab (another compound being developed by Arena) was designed to be a peripherally active agonist of CB2. Similarly, LP659 was designed to be a centrally acting, S1P1,5 receptor modulator with greater brain penetration than other compounds developed by Arena with a similar mechanism of action.

In October 2020, we entered into a License Agreement (Arena License Agreement) with Arena, under which we have exclusive rights to develop our product candidates for neurological disease indications. In addition to LP352, LP143 and LP659, we plan to continue to identify and develop other clinically differentiated product candidates for neurological diseases with high unmet medical need.

In addition, in October 2020, we purchased the right to receive all milestone payments, royalties, interest and other payments relating to net sales of lorcaserin owed or otherwise payable by Eisai, pursuant to a Royalty Purchase Agreement with Arena and 356 Royalty Inc., a wholly owned subsidiary of Arena. Lorcaserin is currently in a Phase 3 clinical trial for Dravet syndrome.

In October 2020, we completed a $56.0 million private placement of our Series A convertible preferred stock (Series A preferred stock), with participation by Arena, Cormorant Asset Management, Farallon Capital Management, HBM Healthcare Investments, Highside Capital Management and T. Rowe Price Associates.

Our Strategy

Our goal is to develop therapies targeting well-characterized receptor pathways with optimized pharmacology and PK properties to transform the lives of patients with neurological diseases, initially focused on rare neurological diseases. Key elements of our strategy to achieve this goal include:

- Advance our lead program LP352 through clinical development and approval in DEEs.
- Progress LP143 into clinical development for neurodegenerative diseases associated with neuroinflammation caused by microglial activation.
- Continue preclinical development of LP659 across a range of CNS diseases associated with neuroinflammation and progress into clinical development.
- Identify additional product candidates and expand current candidates into additional neurological diseases.
- Explore strategic collaborations to maximize the value of our product candidates.

Risks Associated with Our Business

Investing in our common stock involves substantial risk. The risks described under the heading "Risk Factors" immediately following this 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 a very limited operating history, and we have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.

- Even if this offering is successful, we will require substantial additional capital to finance our operations, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate certain of our product development efforts or other operations.
- We are early in our development efforts and have only one product candidate, LP352, in early clinical development. All of our other product candidates are in the preclinical stage. If we are unable to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.
- We are in the process of completing our first Phase 1 clinical trial, have never conducted later-stage clinical trials or submitted a new drug application (NDA), and may be unable to do so for any of our product candidates.
- Because we have multiple product candidates in our clinical pipeline and are considering a variety of target indications, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.
- Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial potential or result in significant negative consequences following any potential marketing approval.
- We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than us.
- The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.
- We depend on intellectual property licensed from Arena, the termination of which could result in the loss of significant rights, which would harm our business.
- Arena currently performs or supports many of our operating activities and will continue to do so after the closing of this offering pursuant to a services agreement, and if we are unable to replicate or replace these functions if this services agreement is terminated, our operations could be adversely affected.
- COVID-19 has impacted and could continue to adversely impact our business.
- 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.
- Sales of a substantial number of shares of our common stock by our existing stockholders, including Arena, in the public market, or the perception that such sales could occur, could cause our stock price to fall.

Implications of Being an Emerging Growth Company and Smaller Reporting Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). We may take advantage of certain exemptions from various public company reporting requirements, 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, 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 (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 stockholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions until the last day of the fiscal year ending after the fifth anniversary of this offering 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 (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 not included all of the executive compensation related information that would be required if we were not an emerging growth company, and we may elect to take advantage of other reduced reporting requirements in future filings. 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 from new or revised accounting standards, and therefore we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

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

Corporate Information

We were incorporated in January 2020 under the name Arena Neuroscience, Inc., a Delaware corporation. In October 2020, we changed our name to Longboard Pharmaceuticals, Inc. Our principal executive offices are located at 6154 Nancy Ridge Drive, San Diego, California 92121, and our telephone number is (619) 592-9775. Our website address is www.longboardpharma.com. Information contained in, or that can be accessed through, our website is not incorporated by reference into this prospectus. Our wave design logo, "Longboard," "Longboard Pharmaceuticals," and common law trade names, trademarks and service marks are the licensed intellectual property of Longboard Pharmaceuticals, Inc.

The Offering	
Common stock offered by us	5,000,000 shares.
Common stock and non-voting common stock to be outstanding immediately after this offering	16,916,990 shares (of which 13,287,590 shares will be common stock) or 17,666,990 shares (of which 14,037,590 shares will be common stock) if the underwriters exercise their option to purchase additional shares of our common stock in full.
Option to purchase additional shares	We have granted the underwriters the option to purchase up to an additional 750,000 shares of our common stock. The underwriters can exercise this option at any time within 30 days after the date of this prospectus.
Exchange	We have entered into an Exchange Agreement, dated March 5, 2021, with certain holders of our Series A preferred stock (Exchange Agreement), pursuant to which we agreed to issue, immediately prior to the closing of this offering, newly issued shares of our non-voting common stock in exchange for outstanding shares of our Series A preferred stock, in an amount such that shares held by such holder, including any shares purchased in this offering and shares of voting common stock issued upon conversion of Series A preferred stock, will result in such holder beneficially owning not more than 9.99% of our common stock as of immediately following the closing of this offering. See “Certain Relationships and Related Person Transactions—Exchange Agreement” for additional information.
Use of proceeds	We estimate that our net proceeds from this offering will be approximately $67.4 million (or approximately $77.9 million if the underwriters exercise their option to purchase additional shares of our common stock in full), after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds we receive from this offering to fund our development of (i) LP352, including through the completion of our planned Phase 1b/2a clinical trial, (ii) LP143, including through the completion of a Phase 1 clinical trial, (iii) LP659, and (iv) the remainder for additional discovery and preclinical development of additional product candidates and potential additional development of our existing product candidates, as well as headcount costs, working capital and other general corporate purposes. See “Use of Proceeds” for additional information.
Proposed Nasdaq Global Market symbol	“LBPH”
Risk factors	See “Risk Factors” for a discussion of factors you should consider carefully before deciding to invest in our common stock.

The number of shares of our common stock and non-voting common stock to be outstanding immediately after this offering set forth above is based on 11,916,990 shares of our common stock and non-voting common stock outstanding as of December 31, 2020, including 348,450 shares subject to repurchase, and assumes (i) the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock pursuant to the Exchange Agreement (the Exchange) and (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering, and excludes:

- 873,264 shares of our common stock issuable upon the exercise of outstanding stock options as of December 31, 2020, with a weighted-average exercise price of $3.42 per share;
- 194,269 shares of our common stock issuable upon the exercise of outstanding stock options granted after December 31, 2020, with a weighted average exercise price of $8.46 per share;
- 1,766,699 shares of our common stock reserved for future issuance under our 2021 Equity Incentive Plan (2021 Plan), which will become effective upon the execution and delivery of the underwriting agreement for this offering, as well as any automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan and any shares underlying outstanding stock awards granted under our 2020 Plan that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section entitled “Executive Compensation—Equity Incentive Plans”; and
- 353,339 shares of our common stock reserved for issuance under our 2021 Employee Stock Purchase Plan (ESPP), which will become effective upon the execution and delivery of the underwriting agreement for this offering, and any automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP; and
- 110,933 shares of our common stock issuable upon the exercise of stock options to be granted to certain of our directors and employees under our 2021 Plan, contingent and effective upon the effectiveness of the registration statement of which this prospectus forms a part, with an exercise price per share that is equal to the price per share at which our common stock is first sold to the public in this offering.

In addition, unless we specifically state otherwise, the information in this prospectus assumes or gives effect to:

- the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock in the Exchange;
- the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into an aggregate of 4,098,600 shares of our common stock upon the closing of this offering;
- no exercise of the outstanding options described above;
- no exercise of the underwriters’ option to purchase up to an additional 750,000 shares of common stock from us in this offering;
- an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus;
- a 1.38-for-1 forward stock split of our common stock effected on March 5, 2021; and
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws upon the closing of this offering.

Summary Financial Data

The following tables set forth a summary of our financial data as of, and for the period ended on, the date indicated. The statement of operations and comprehensive loss data for the period from January 3, 2020 (inception) through December 31, 2020, and the balance sheet data as of December 31, 2020, are derived from our audited financial statements that are included elsewhere in this prospectus.

You should read the following summary financial data together with the sections entitled "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 in this section are not intended to replace our financial statements and the related notes and are qualified in their entirety by the financial statements and related notes included elsewhere in this prospectus. Our historical results are not necessarily indicative of results that should be expected in any future period.

	Period from January 3, 2020 (Inception) through December 31, 2020 (in thousands, except share and per share data)
Statement of Operations and Comprehensive Loss Data:	
Operating expenses:	
Research and development (includes related party amounts of $1,025)	$ 4,633
General and administrative (includes related party amounts of $8,295)(1)	9,767
Total operating expenses	14,400
Loss from operations	(14,400)
Net loss and comprehensive loss	$ (14,400)
Net loss per share, basic and diluted(2)	$ (3.78)
Weighted-average number of shares used in computing net loss per share, basic and diluted(2)	3,808,887

(1) General and administrative expense for the period includes a one-time expense of $7.4 million related to the acceleration of vesting and the extension of the exercise period for our President and Chief Executive Officer's, Kevin R. Lind's, equity awards outstanding at Arena. See Note 7 to our financial statements included elsewhere in this prospectus for additional information.

(2) See Note 2 to our financial statements included elsewhere in this prospectus for a description of how we compute basic and diluted net loss per share and the weighted-average number of shares used in the computation of these per share amounts.

	As of December 31, 2020		
	Actual	Pro Forma(1)	Pro Forma, As Adjusted(2)(3)
	(in thousands) (unaudited)		
Balance Sheet Data:			
Cash	$ 55,316	$ 55,316	$ 122,716
Working capital(4)	52,227	52,227	119,627
Total assets	56,238	56,238	122,762
Total liabilities	3,135	3,135	3,135
Series A preferred stock	55,795	—	—
Non-voting common stock	—	—	—
Additional paid in capital	11,708	67,502	134,026
Accumulated deficit	(14,400)	(14,400)	(14,400)
Total stockholders' (deficit) equity	(2,692)	53,103	119,627

(1) Gives effect to (i) the Exchange, and the related reclassification of the carrying value of the shares of Series A preferred stock exchanged in the Exchange to permanent equity, (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock, and the related reclassification of the carrying value of such shares of our Series A preferred stock to permanent equity, which will occur upon the closing of this offering, and (iii) filing and effectiveness of our amended and restated certificate of incorporation that will be in effect upon the closing of this offering.

(2) Gives effect to (i) the items described in footnote (1) above and (ii) the issuance and sale of 5,000,000 shares of our common stock in this offering at the assumed initial public offering price of $15.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share would increase (decrease) each of cash, working capital, total assets and total stockholders' equity by $4.7 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 the underwriting discounts and commissions. Similarly, each increase (decrease) of 1.0 million shares in the number of shares of common stock offered by us would increase (decrease) each of cash, working capital, total assets, and total stockholders' equity by $14.0 million, assuming the assumed initial public offering price of $15.00 per share remains the same, and after deducting the underwriting discounts and commissions.

(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. 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. 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 Limited Operating History, Financial Position and Need For Additional Capital

We have a very limited operating history, and we have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.

We were incorporated in January 2020 and we have a very limited operating history upon which you can evaluate our business and prospects. Our operations to date have been primarily focused on organizing and staffing our company, research and development activities, business planning, raising capital, in-licensing intellectual property rights and establishing our intellectual property portfolio, and providing general and administrative support for these operations. LP352, our most advanced product candidate, is in early clinical development, while our other product candidates, LP143 and LP659, are in the preclinical stage. We have not yet demonstrated an ability to overcome many of the risks and uncertainties frequently encountered by companies in the biopharmaceutical industry, including an ability to obtain regulatory approval of a product candidate, manufacture any product candidate at commercial scale, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. In addition, because we recently in-licensed the rights to each of our product candidates from Arena, we have not yet initiated, conducted or completed a clinical trial as a company. Consequently, any predictions about our future performance may not be as accurate as they would be if we had a history of successfully developing and commercializing biopharmaceutical products.

Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effectiveness in the targeted indication or an acceptable safety profile, gain regulatory approval and become commercially viable. We have no products approved for commercial sale and have not generated any revenue to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses since our inception in January 2020. For the period from January 3, 2020 (inception) through December 31, 2020, we reported a net loss of $14.4 million. As of December 31, 2020, we had an accumulated deficit of $14.4 million.

We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we:

- continue to invest in our research and development activities, including conducting preclinical studies;
- submit INDs and conduct clinical trials for our current and future product candidates;
- seek marketing approvals for any product candidates that successfully complete clinical trials;
- experience any delays or encounter any issues with any of the above, including but not limited to failed studies, negative or mixed clinical trial results, safety issues or other regulatory challenges, the risk of which in each case may be exacerbated by the ongoing COVID-19 pandemic;
- hire additional personnel and build our internal resources to become less reliant on Arena, including those related to audit, patent, other legal, regulatory and tax-related services associated with maintaining

compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor and public relations costs;

- obtain, expand, maintain, enforce and protect our intellectual property portfolio;
- establish a sales, marketing and distribution infrastructure and establish manufacturing capabilities, whether alone or with third parties, to commercialize product candidates for which we may obtain regulatory approval, if any; and
- operate as a public company.

To become and remain profitable, we must succeed in developing and eventually commercializing products that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing clinical trials and preclinical studies of our product candidates, obtaining regulatory approval for these product candidates and manufacturing, marketing and selling any products for which we may obtain regulatory approval. We are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to achieve profitability. Because of the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product candidates or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Even if this offering is successful, we will require substantial additional capital to finance our operations, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate certain of our product development efforts or other operations.

We expect our expenses to increase substantially in connection with our ongoing and planned activities, particularly as we continue to develop our product candidates in preclinical studies and clinical trials and expand our organization by hiring additional personnel. Our expenses will increase substantially if our product candidates successfully complete early clinical and other studies, and also could increase beyond expectations if the FDA or other regulatory authorities require us to perform clinical and other studies in addition to those that we currently anticipate. In addition, following the closing of this offering, we expect to incur additional costs associated with operating as a public company. Furthermore, if we obtain marketing approval for our product candidates, we expect to incur significant expenses related to manufacturing, marketing, sales and distribution.

As of December 31, 2020, our cash was $55.3 million. 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. However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings, third-party funding, marketing and distribution arrangements, as well as other collaborations, strategic alliances and licensing arrangements, or any combination of these approaches.

In any event, we will require substantial additional capital to support our business operations as we pursue additional preclinical and clinical activities and regulatory approval of our current or any future product candidates, and otherwise to support our continuing operations. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Even if we believe we have sufficient capital for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations. Any additional capital raising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and, if approved, commercialize our current and any future product candidates.

Additional funding may not be available on acceptable terms, or at all. As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly or more dilutive. If we do not raise additional capital in sufficient amounts, we may be prevented from pursuing development and commercialization efforts, which will harm our business, operating results and prospects.

Raising additional capital or acquiring or licensing assets by issuing equity or debt securities may cause dilution to our stockholders, and raising funds through lending and licensing arrangements may restrict our operations or require us to relinquish proprietary rights.

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and 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 may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional capital through future collaborations, strategic alliances or third-party licensing arrangements, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us.

If we are unable to raise additional capital 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 develop and market ourselves.

Risks Related to the Development and Commercialization of Our Product Candidates

We are early in our development efforts and have only one product candidate, LP352, in early clinical development. All of our other product candidates are in the preclinical stage. If we are unable to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are in the early stages of our development efforts and have only one product candidate, LP352, in early clinical development. We are investigating LP352 in a Phase 1 clinical trial for which the SAD portion has been completed. We initiated the MAD portion of this clinical trial in February 2021 and while we expect to report topline data for the MAD portion of the clinical trial in the second half of 2021, it is possible that the MAD portion of the clinical trial will take longer than anticipated to complete due to unexpected delays. Our other product candidates, including LP143 and LP659, are in the preclinical stage. We will need to progress LP143, LP659 and any other early product candidates through IND-enabling studies and submit INDs to the FDA prior to initiating their clinical development. Moreover, none of our product candidates have advanced into a pivotal study. Our ability to generate product revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following:

- successful enrollment in clinical trials and completion of clinical trials and preclinical studies with favorable results;
- clearance of INDs by the FDA or similar regulatory filings by comparable foreign regulatory authorities for the conduct of clinical trials of our product candidates and our proposed design of future clinical trials;

- demonstrating the safety and efficacy of our product candidates to the satisfaction of applicable regulatory authorities;
- receipt of marketing approvals from applicable regulatory authorities, including NDAs from the FDA and maintaining such approvals;
- making arrangements with third-party manufacturers for, or establishing, clinical and commercial manufacturing capabilities;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- establishing and maintaining of patent and trade secret protection or regulatory exclusivity for our product candidates;
- maintaining an acceptable safety profile of our products following approval; and
- building and maintaining an organization of people who can successfully develop our product candidates.

The success of our business, including our ability to finance our company and generate any revenue in the future, will primarily depend on the successful development, regulatory approval and commercialization of our most advanced product candidate, LP352, as well as our other product candidates, which may never occur. We have not yet succeeded and may not succeed in demonstrating efficacy and safety for any product candidates in clinical trials or in obtaining marketing approval thereafter. Given our early stage of development, it will take several years before we can demonstrate the safety and efficacy of a treatment sufficient to warrant approval for commercialization, if we can do so at all. If we are unable to develop, or obtain regulatory approval for, or, if approved, successfully commercialize our product candidates, we may not be able to generate sufficient revenue to continue our business.

Risks associated with the in-licensing or acquisition of product candidates could cause substantial delays in the preclinical and clinical development of our product candidates.

Prior to October 2020, as a company we had no involvement with or control over the preclinical and early clinical research and development of our product candidates. We have relied on third parties, including Arena, to have conducted such research and development in accordance with the applicable protocol, legal, regulatory and scientific standards prior to the in-licensing of our product candidates. If the research and development processes or the results of the development programs prior to the in-licensing of our product candidates prove to be unreliable, this could result in increased costs and delays in the development of our product candidates, which could adversely affect any future revenue from these product candidates.

We may also acquire or in-license additional product candidates for preclinical or clinical development in the future as we continue to build our pipeline. The risks associated with acquiring or in-licensing current or future product candidates could result in delays in the commencement or completion of our preclinical studies and clinical trials, if ever, and our ability to generate revenues from our product candidates may be delayed.

Clinical and preclinical drug development involves a lengthy and expensive process with an uncertain outcome. The results of prior clinical trials and early preclinical studies and clinical trials of our product candidates are not necessarily predictive of future results.

Before obtaining marketing approval from the FDA, European Medicines Agency (EMA) or other comparable foreign regulatory authorities for the sale of our product candidates, we must complete preclinical development and extensive clinical trials to demonstrate the safety and efficacy of our product candidates. Clinical and preclinical drug development is expensive and can take many years to complete, and its outcome is inherently uncertain. Our clinical trials may not be conducted as planned or completed on schedule, if at all, and failure can occur at any time during the preclinical study or clinical trial process. Despite promising preclinical or

clinical results, any product candidate can unexpectedly fail at any stage of preclinical or clinical development. The historical failure rate for product candidates in our industry is high. The results from preclinical studies or early clinical trials of a product candidate may not predict the results of later clinical trials of the product candidate, and interim results of a clinical trial are not necessarily indicative of final results. Furthermore, product candidates in later stages of clinical trials may fail to show the desired safety and efficacy characteristics despite having progressed through preclinical studies and initial clinical trials.

In particular, while we have initial Phase 1 clinical trials results from the SAD portion of the ongoing Phase 1 clinical trial of LP352, we do not know how LP352 will perform in the MAD portion of this trial or in future clinical trials, including our planned Phase 1b/2a clinical trial. It is not uncommon to observe results in clinical trials that are unexpected based on preclinical studies and early clinical trials, and many product candidates fail in clinical trials despite very promising early results. Moreover, preclinical and clinical data may be susceptible to varying interpretations and analyses. A number of companies in the biopharmaceutical industry have suffered significant setbacks in clinical development even after achieving promising results in earlier studies, or after others, including regulatory authorities, disagreed with such companies' views and interpretations of the data and results from earlier preclinical studies or clinical trials. Further, neither we nor any third party, including Arena, have conducted preclinical studies of LP352 with respect to epilepsy or in the treatment of pediatric patients. As we investigate LP352 for DEEs and other epileptic diseases, we may encounter difficulties that we have not yet encountered in our Phase 1 clinical trial of LP352. Furthermore, LP143 and LP659 may not be able to progress from preclinical to Phase 1 clinical development.

Clinical trials may not be conducted as planned or completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include:

- delays in reaching a consensus with regulatory authorities on trial design or implementation;
- delays in obtaining regulatory authorization to commence a trial;
- delays in reaching agreement on acceptable terms with prospective clinical research organizations (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;
- delays in obtaining approval from one or more institutional review boards (IRBs), or IRBs refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional participants, or withdrawing their approval of the trial;
- delays in recruiting suitable patients to participate in our ongoing and planned clinical trials;
- changes to the clinical trial protocol;
- clinical sites deviating from trial protocol or dropping out of a trial;
- delays in manufacturing sufficient quantities of our product candidates for use in clinical trials;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- participants choosing an alternative treatment for the indication for which we are developing our product candidates, or participating in competing clinical trials;
- lack of adequate funding to continue a trial;
- occurrence of AEs or SAEs associated with the product candidate that are viewed to outweigh its potential benefits;
- occurrence of SAEs 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;

- a facility manufacturing our product candidates or any of their components being ordered by the FDA or comparable foreign regulatory authorities to temporarily or permanently shut down due to violations of current good manufacturing practice (cGMP) regulations or other applicable requirements, or infections or cross-contaminations of product candidates in the manufacturing process;
- third-party clinical investigators losing the licenses or permits necessary to perform our clinical trials, not performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol (GCP) or other regulatory requirements; or
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols.

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 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 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 our product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical 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.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter difficulties or delays in initiating, screening, enrolling, conducting, or completing our ongoing and planned preclinical studies and clinical trials. Clinical site initiation and patient screening and enrollment may be delayed due to prioritization of hospital resources toward the COVID-19 pandemic. Investigators and patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19, could be limited, which in turn could adversely impact our clinical trial operations. Additionally, we may experience interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel, quarantines or social distancing protocols imposed or recommended by federal or state governments, employers and others in connection with the ongoing COVID-19 pandemic. As a result of the COVID-19 pandemic, we have faced and may continue to face delays in meeting our anticipated timelines for our ongoing and planned clinical trials. Specifically, the initiation of the MAD portion of the Phase 1 clinical trial of LP352 was delayed, in part, as a result of the impact of the COVID-19 pandemic on the clinical site in the United Kingdom that conducted the SAD portion of the Phase 1 clinical trial for LP352, and subsequently we modified the protocol and relocated the MAD portion of such trial to a new clinical site in the United States.

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

which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

We are in the process of completing our first Phase 1 clinical trial, have never conducted later-stage clinical trials or submitted an NDA, and may be unable to do so for any of our product candidates.

We are early in our development efforts for our product candidates, and we will need to successfully complete Phase 1 clinical trials and later-stage and pivotal clinical trials in order to obtain FDA or comparable foreign regulatory approval to market LP352, LP143, LP659 or any future product candidates. Carrying out clinical trials and the submission of NDAs is complicated. We are in the process of conducting our first Phase 1 clinical trial for LP352 and have not yet conducted any clinical trials for our other product candidates. We have not conducted any later stage or pivotal clinical trials, have limited experience as a company in preparing, submitting and prosecuting regulatory filings and have not previously submitted an NDA or other comparable foreign regulatory submission for any product candidate. We also plan to conduct a number of clinical trials for multiple product candidates in parallel over the next several years. This may be a difficult process to manage with our limited resources and may divert the attention of management. In addition, we have had limited interactions with the FDA and cannot be certain how many clinical trials of our product candidates will be required or how such trials will have to be designed. Consequently, we may be unable to successfully and efficiently execute and complete necessary clinical trials in a way that leads to regulatory submission and approval of any of our product candidates. We may require more time and incur greater costs than our competitors and may not succeed in obtaining regulatory approvals of product candidates that we develop. Failure to commence or complete, or delays in, our planned clinical trials, could prevent us from or delay us in submitting NDAs for and commercializing our product candidates.

Because we have multiple product candidates in our clinical pipeline and are considering a variety of target indications, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on specific product candidates, indications and development programs. We may also conduct several clinical trials for our product candidates in parallel over the next several years, which may make our decision as to which product candidates to focus on more difficult. For example, we are advancing the MAD portion of the Phase 1 clinical trial for LP352 for the treatment of DEEs and other epileptic diseases in healthy volunteers, and are currently planning to conduct a Phase 1b/2a clinical trial for LP352 for DEEs, including Dravet syndrome and Lennox-Gastaut syndrome, among others, in the first quarter of 2022. Further, we are investigating in pre-clinical studies LP143 for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including ALS, and LP659 for CNS neuroinflammatory diseases. As a result, we may forgo or delay pursuit of opportunities with other product candidates or other indications that could have had greater commercial potential or likelihood of success. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through future collaborations, licenses and other similar arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

Enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside our control.

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 our product candidates 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 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. For example the number of patients suffering from DEEs, such as Dravet syndrome and Lennox-Gastaut syndrome and ALS, is small and, in some cases, has not been established with precision. If the actual number of patients with these diseases is smaller than we anticipate, we may encounter difficulties in enrolling patients in our clinical trials, thereby delaying or preventing development and approval of our product candidates. Even once enrolled we may be unable to retain a sufficient number of patients to complete any of our trials.

Patient enrollment and retention in clinical trials depends on many factors, including the size of the patient population, the severity of the disease under investigation, the nature of the trial protocol, the existing body of safety and efficacy data for the product candidate, the number and nature of competing treatments and ongoing clinical trials of competing therapies for the same indication, the proximity of patients to clinical sites, the eligibility criteria for the trial, the ability to adequately monitor patients during a trial, clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied, and the risk that patients will drop out of a trial before completing all site visits. There are limited patient pools from which to draw in order to complete our clinical trials in a timely and cost-effective manner, including due to the fact that the neurological diseases we target are rare.

Furthermore, our efforts to build relationships with patient communities may not succeed, which could result in delays in patient enrollment in our clinical trials. In addition, any negative results we may report in clinical trials of our product candidate may make it difficult or impossible to recruit and retain patients in other clinical trials of that same product candidate. Delays or failures in planned patient enrollment or retention may result in increased costs, program delays or both, which could have a harmful effect on our ability to develop our product candidates, or could render further development impossible. For example, the impact of public health epidemics, such as the ongoing COVID-19 pandemic, may delay or prevent patients from enrolling or from receiving treatment in accordance with the protocol and the required timelines, which could delay our clinical trials, or prevent us or our partners from completing our clinical trials at all, and harm our ability to obtain approval for such product candidate. Further, if patients drop out of our clinical trials, miss scheduled doses or follow-up visits, or otherwise fail to follow clinical trial protocols, whether as a result of the COVID-19 pandemic and related illness or actions taken to slow the spread of COVID-19 or otherwise, the integrity of data from our clinical trials may be compromised or not accepted by the FDA or other regulatory authorities, which would represent a significant setback for the applicable program. In addition, we may rely on CROs and clinical trial sites to ensure proper and timely conduct of our future clinical trials and, while we intend to enter into agreements governing their services, we will be limited in our ability to compel their actual performance.

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

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

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

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial potential or result in significant negative consequences following any potential marketing approval.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their doctor. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. Regulatory authorities may draw different conclusions or require additional testing to confirm these determinations, if they occur.

In addition, it is possible that as we test our product candidates in larger, longer and more extensive clinical programs, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other AEs that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by participants. Many times, side effects are only detectable after investigational product candidates are tested in large-scale, Phase 3 trials or, in some cases, after they are made available to patients on a commercial scale after approval. Patients in our ongoing or planned clinical trials may experience similar or other side effects after treatment with one or more of our product candidates. If additional clinical experience indicates that any of our current product candidates and any future product candidates has serious or life-threatening side effects or other side effects that outweigh the potential therapeutic benefit, the development of the product candidate may fail or be delayed, or, if the product candidate has received regulatory approval, such approval may be revoked, which would harm our business, prospects, operating results and financial condition.

Moreover, if we elect, or are required, to delay, suspend or terminate any clinical trial of our product candidates, the commercial prospects of our product candidates may be harmed and our ability to generate revenue through their sale may be delayed or eliminated. Any of these occurrences may harm our business, financial condition and prospects significantly.

LP352, our most advanced product candidate, is an oral, centrally acting, 5-HT2c superagonist with negligible observed impact on 5-HT2b and 5-HT2a receptor subtypes in our preclinical studies to date. 5-HT2b and 5-HT2a receptor subtypes have been known to be associated with significant adverse side effects, including valvular heart disease and pulmonary arterial hypertension in the case of the 5-HT2b receptor, and hallucinations and mild to severe anxiety in the case of the 5-H2Ta receptor. LP352 has the potential to be a clinically differentiated 5-HT2c superagonist for patients with DEEs. For example, fenfluramine, marketed as FINTEPLA,

a non-specific 5-HT2 agonist, was recently approved for the treatment of seizures associated with Dravet syndrome by the FDA. Fenfluramine has been associated with significant side effects and FINTEPLA has a REMS program requirement and a boxed warning. Another 5-HT2c agonist, lorcaserin, is also under evaluation for its potential to reduce seizures in patients with Dravet syndrome and refractory epilepsies. Lorcaserin was discovered by Arena and approved by the FDA for chronic weight management, marketed as BELVIQ by Eisai. Lorcaserin was withdrawn from the market at the request of the FDA following the FDA's analysis of the CAMELLIA-TIMI 61 clinical trial, for which patients in the lorcaserin group demonstrated a numerically higher but not a statistically significantly higher rate of total cancer diagnoses (7.7% vs 7.1% placebo). Based on the results of this clinical trial, the FDA concluded that the risks of lorcaserin outweigh the benefits, and requested that lorcaserin be withdrawn from the market for the approved indication of weight management. However, the FDA authorized an expanded access program for patients with Dravet syndrome to continue to receive lorcaserin. LP352 was designed and developed by Arena to be the next generation to lorcaserin, with the goal of being a safer and more effective 5-HT2c agonist. We believe LP352's potential for high selectivity and novel chemistry gives it the potential to reduce seizures in DEE patients and overcome the known or perceived safety limitations of available drugs in the 5-HT2 class. However, we may not be correct, and the selectivity, specificity or other attributes of LP352 may result in similar or less desirable clinical profiles than less selective and specific available drugs or other product candidates. Further, in nonclinical toxicity studies of LP352 in rats and non-human primates (NHPs) conducted by Outpost Medicine, LLC prior to returning the product to Arena, certain male rats and NHPs of varying degrees of maturity in the respective high dose groups experienced minimal to slight degeneration/atrophy of the seminiferous tubules with reduced spermatocyte maturation. Although exposure levels for these high dose groups were estimated to be far in excess of planned human exposures in our clinical trials and no similar AEs were observed in our subsequent toxicity studies in sexually mature rats and NHPs, patients in future clinical trials may experience side effects similar to those observed in animals.

In addition, if any of our product candidates receive marketing approval, the FDA could require us to include a black box warning in our label or adopt REMS to ensure that the benefits outweigh its risks, which may include, among other things, a medication guide outlining the risks of the drug for distribution to patients and a communication plan to health care practitioners. Furthermore, if we or others later identify undesirable side effects caused by our product candidates, several other potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label, including "boxed" warnings, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients;
- we may need to conduct a recall; and
- our reputation may suffer.

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

We may explore strategic collaborations that may never materialize or may fail.

We intend to broaden the global reach of our platform by selectively collaborating with leading biopharmaceutical companies. We intend to retain significant economic and commercial rights to our programs in key geographic areas that are core to our long-term strategy. As a result, we intend to periodically explore a variety of possible additional strategic collaborations in an effort to gain access to additional product candidates

or resources. At the current time, we cannot predict what form such a strategic collaboration might take. We are likely to face significant competition in seeking appropriate strategic collaborators, and strategic collaborations can be complicated and time consuming to negotiate and document. We may not be able to negotiate strategic collaborations on acceptable terms, or at all. We are unable to predict when, if ever, we will enter into any additional strategic collaborations because of the numerous risks and uncertainties associated with establishing them.

If the market opportunities for our product candidates are smaller than we estimate, even assuming approval of a product candidate, our business may suffer. Because the patient populations in the market for our product candidates may be small, we must be able to successfully identify patients and acquire a significant market share to achieve profitability and growth.

We focus on developing novel medicines for neurological diseases. Given the small number of patients who have the diseases that we are targeting, our eligible patient population and pricing estimates may differ significantly from the actual market addressable by our product candidates. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are based on estimates that have been derived from a variety of sources, including scientific literature, patient foundations, or market research, and which may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. Likewise, the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our results of operations and our business.

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

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

DEEs are commonly treated with multiple combinations of antiepileptic drugs (AEDs) though physician preference for administered therapies differs across different epilepsy types. Pharmaceutical companies, such as Eisai, Lundbeck, Pfizer, and UCB have approved AEDs for the treatment of epilepsies. There are also non-pharmaceutical therapies for epilepsy patients, such as a ketogenic diet, vagus nerve stimulation, and surgery for some patients. Recently, two companies have obtained FDA approval for symptoms associated with DEEs. Fenfluramine was approved for the treatment of seizures associated with Dravet syndrome in June 2020, and became available through a REMS program in July 2020, and cannabidiol was approved by the FDA for the treatment of seizures associated with Dravet syndrome and Lennox-Gastaut syndrome in 2018. Lorcaserin also is in a Phase 3 clinical trial for the treatment of seizures associated with Dravet syndrome. In addition, other companies are developing therapeutics for the treatment of epilepsies, including alternative approaches such as gene therapy.

There is currently no cure for ALS. Rilutek (riluzole) and Radicava (edaravone) are the only FDA approved drugs that have been observed to slow disease progression in ALS. There are a number of companies seeking to developing treatments for ALS.

In the S1P receptor modulator space, there are three drugs that have been approved by the FDA for the treatment of certain indications in multiple sclerosis: fingolimod, ozanimod, and siponimod. There are multiple additional S1P receptor modulators in development for additional therapeutic indications beyond multiple sclerosis, including in other neurodegenerative diseases. There are also numerous other drugs and product candidates in development for indications for which we might develop our product candidates.

Additional, potential competitors include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the indications that we are pursuing. More established companies may have a competitive advantage over us due to their greater size, resources and institutional experience. In particular, these companies have greater experience and expertise in securing reimbursement, government contracts, relationships with key opinion leaders, conducting testing and clinical trials, obtaining and maintaining regulatory approvals and distribution relationships to market products, and marketing approved drugs. These companies also have significantly greater research and marketing capabilities than we do. If we are not able to compete effectively against existing and potential competitors, our business and financial condition may be harmed.

The key competitive factors affecting the success of our product candidates are likely to be their efficacy and safety, the scope and limitations of marketing approval, success of regulatory approval, successful protection of our intellectual property, and the availability of funding and reimbursement.

As a result of these factors, our competitors may obtain regulatory approval of their drugs before we are able to, which may limit our ability to develop or commercialize our product candidates. Our competitors may also develop therapies that are safer, more effective, more widely accepted and cheaper than ours, and may also be more successful than us in manufacturing and marketing their drugs. These appreciable advantages could render our product candidates obsolete or non-competitive before we can recover the expenses of such product candidates' development and commercialization.

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

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA 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. We have not obtained regulatory approval for any product candidate and it is possible that any product candidates we may seek to develop in the future will never obtain regulatory approval. Neither we nor any future collaborator is permitted to market any of our product candidates in the United States until we receive regulatory approval of an NDA from the FDA.

Prior to obtaining approval to commercialize a product candidate in the United States or abroad, we or our collaborators must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or foreign regulatory agencies, that such product candidates are safe and effective for their intended uses. To demonstrate the safety of our clinical products, we may also be required to conduct extensive clinical trials and nonclinical studies, some of which have not been initiated or completed, and may not be completed for several years. For example, we believe that we will need to conduct additional nonclinical studies in juvenile animals, as well as develop a liquid formulation, to support the evaluation of LP352 in pediatric populations. We also expect that we will need to conduct additional toxicology, long-term carcinogenicity and other nonclinical studies to support the safety evaluation of LP352 and any of our product candidates intended to be administered for an extended period of time. There is no assurance our development or these studies will be successful. In addition, results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe the nonclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. The FDA may also require us to conduct additional preclinical studies or clinical trials for our product candidates either prior to or post-approval, or it may object to elements of our clinical development program.

The FDA or any foreign regulatory bodies can delay, limit or deny approval of our product candidates or require us to conduct additional nonclinical or clinical testing or abandon a program for, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- serious and unexpected drug-related side effects experienced by participants in our clinical trials or by individuals using drugs similar to our product candidates;
- we may be unable to demonstrate that a product candidate’s clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be acceptable or sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere, and we may be required to conduct additional clinical studies;
- the FDA’s or the applicable foreign regulatory authority may disagree regarding the formulation, labeling and/or the specifications of our product candidates;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

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

Even if our current or future product candidates receive marketing approval, they may fail to achieve market acceptance by physicians, patients, third-party payors or others in the medical community necessary for commercial success.

Even if our current or future product candidates receive marketing approval, they may fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. If they do not achieve an adequate level of acceptance, we may not generate significant product revenue and may not become profitable. The degree of market acceptance of our current or future product candidates, if approved for commercial sale, will depend on a number of factors, including but not limited to:

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

Our efforts to educate physicians, patients, third-party payors and others in the medical community on the benefits of our product candidates may require significant resources and may never be successful. Such efforts may require more resources than are typically required due to the complexity and uniqueness of our product candidates.

In addition, if approved, LP352 may face challenges in gaining market acceptance by physicians, patients, third-party payors or others in the medical community as a result of it being a 5-HT2c agonist, which is part of an agonist class associated with significant risks and side effects. For example, fenfluramine, marketed as FINTEPLA, is a non-specific 5-HT2 agonist, has been associated with significant side effects and FINTEPLA has a REMS program requirement and a boxed warning. Another 5-HT2c agonist, lorcaserin, is also under evaluation for its potential to reduce seizures in patients with Dravet syndrome and refractory epilepsies. Lorcaserin was discovered by Arena and approved by the FDA for chronic weight management, marketed as BELVIQ by Eisai and withdrawn from the market at the request of the FDA based on a change in the FDA's risk-benefit assessment for the approved indication. However, the FDA authorized an expanded access program for patients with Dravet syndrome to continue to receive lorcaserin.

Although we aim to improve upon current 5-HT2c agonist product profiles with LP352, which was designed to be the next generation to lorcaserin, with the goal of being a safer and more effective 5-HT2c agonist, and which we believe has the potential to overcome the limitations of the currently available 5-HT2 class, if we are

unable to do so and to educate physicians, patients, third-party payors and others in the medical community about this product candidate and successfully distinguish the safety profile of this product candidate to those of other products in the 5-HT2c agonist class, we may fail to gain market acceptance of LP352.

Because we expect sales of our product candidates, if approved, to generate substantially all of our revenues for the foreseeable future, the failure of our product candidates, if approved, to find market acceptance would harm our business and could require us to seek additional financing.

Even if we obtain regulatory approval for our current or future product candidates, they will remain subject to ongoing regulatory oversight.

Even if we obtain any regulatory approval for our current or any future product candidates, such approvals will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping and submission of safety and other post-market information. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as on-going compliance with cGMPs and GCPs for any clinical trials that we may conduct post-approval. Any regulatory approvals that we receive for our current or future product candidates may also be subject to a REMS, limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 trials, and surveillance to monitor the quality, safety and efficacy of the drug.

In addition, drug manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the NDA or foreign marketing application. If we, or a regulatory authority, discover previously unknown problems with a drug, such as AEs of unanticipated severity or frequency, or problems with the facility where the drug is manufactured or if a regulatory authority disagrees with the promotion, marketing or labeling of that drug, a regulatory authority may impose restrictions relative to that drug, the manufacturing facility or us, including requesting a recall or requiring withdrawal of the drug from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of our current or future product candidates, a regulatory authority may:

- issue an untitled letter or warning letter asserting that we are in violation of the law;
- seek an injunction or impose administrative, civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or NDA supplement, or comparable foreign marketing application (or any supplements thereto) submitted by us or our strategic partners;
- restrict or suspend the marketing or manufacturing of the drug;
- seize or detain the drug or otherwise require the withdrawal of the drug from the market;
- refuse to permit the import or export of product candidates; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our current or future product candidates and harm our business, financial condition, results of operations and prospects.

In addition, the FDA's policies, and those of equivalent foreign regulatory agencies, may change and additional government regulations may be enacted that could cause changes to or delays in the drug review process, or suspend or restrict regulatory approval of our product candidates. 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, which would harm our business, financial condition, results of operations and prospects.

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

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

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

Obtaining and maintaining regulatory approval of our product candidates 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 grants regulatory 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 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 preclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Obtaining foreign 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 products in certain countries. If we or any future collaborator fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidate that we may develop.

We face an inherent risk of product liability exposure related to the testing of our current and any future product candidates in clinical trials and may face an even greater risk if we commercialize any product candidate that we may develop. If we cannot successfully defend ourselves against claims that any such product candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidate that we may develop;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- substantial monetary awards to trial participants or patients;
- significant time and costs to defend the related litigation;
- a diversion of management's time and our resources;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- the inability to commercialize any product candidate that we may develop;
- injury to our reputation and significant negative media attention; and
- a decline in our share price.

Any product liability insurance coverage that we obtain and maintain may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage each time we commence a clinical trial and if we successfully commercialize any product candidate. Insurance coverage is increasingly expensive. We may not be able to obtain or maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to Regulatory Compliance

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

Healthcare providers, including physicians, and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors may subject us to various federal and state fraud and abuse laws and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute, the federal civil and criminal false claims laws and the law commonly referred to as the Physician Payments Sunshine Act and

regulations. These laws will impact, among other things, our clinical research, as well as our proposed sales, marketing and educational programs. In addition, we may be subject to data privacy and security laws by both the federal government and the states in which we conduct or may conduct our business. The laws that will affect our operations include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, in return for the purchase, recommendation, leasing or furnishing of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs. This statute has been interpreted to apply to, among other things, arrangements between pharmaceutical manufacturers on the one hand, and prescribers, purchasers and formulary managers on the other. A person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation;
- federal civil and criminal false claims laws, including, without limitation, the False Claims Act, and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other government payors that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which created additional federal criminal statutes that prohibit, among other things, a person from knowingly and willfully executing a scheme or making false or fraudulent statements to defraud any healthcare benefit program, regardless of the payor (e.g., public or private). Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of this 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 (HITECH) and their implementing regulations, which imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization by entities subject to the rule, such as health plans, healthcare clearinghouses and certain healthcare providers, known as covered entities, and their respective business associates, individuals or entities that perform certain services on behalf of a covered entity that involves the use or disclosure of individually identifiable health information and their subcontractors that use, disclose or otherwise process individually identifiable health information;
- The Physician Payments Sunshine Act, which requires certain manufacturers of 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 report annually to the Centers for Medicare & Medicaid Services (CMS), information related to: (i) payments or other “transfers of value” made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, which will be expanded beginning in 2022, to require applicable manufacturers to report information related to payments and other transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, anesthesiologist assistants and certified nurse midwives during the previous year; and (ii) ownership and investment interests held by physicians and their immediate family members;
- state and foreign law equivalents of each of the above federal laws, state laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and/or information regarding drug pricing, state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or to adopt compliance programs as prescribed by state laws and regulations, or that otherwise restrict payments that may be

made to healthcare providers, state laws and regulations that require drug manufacturers to file reports relating to drug pricing and marketing information, and state and local laws that require the registration of pharmaceutical sales representatives; and

- state and foreign laws that govern the privacy and security of personal information, including health-related 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. By way of example, California enacted the California Consumer Privacy Act (CCPA), effective January 1, 2020, which 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. Moreover, a new privacy law, the California Privacy Rights Act (CPRA) was recently approved by California voters. The CCPA and CPRA may increase our compliance costs and potential liability. Further, the EU General Data Protection Regulation (GDPR) imposes obligations and restrictions on the collection and use of personal data relating to individuals in the European Economic Area (EEA) (including health data). The GDPR increases obligations with respect to clinical trials conducted in the EEA by expanding the definition of personal data and requiring changes to informed consent practices and more detailed notices for clinical trial participants and investigators.

In Europe, the GDPR, as well as EU and EEA Member State implementing legislations, apply to the collection and processing of personal data, including health-related information, in certain circumstances, by companies located outside of the EEA and processing personal data of individuals located within the EEA. EU and EEA Member States are also able to legislate separately on health and genetic data, and we must comply with these local laws where we operate. Additionally, Brexit took effect in January 2020, which will lead to further legislative and regulatory changes. 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 in the long term under GDPR. With the expiry of the transition period on December 31, 2020, companies will have to comply with the GDPR and the GDPR as incorporated into United Kingdom national law, which has the ability to separately fine up to the greater of £17.5 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, for example around how data can lawfully be transferred between each jurisdiction, which exposes us to further compliance risk. We may incur liabilities, expenses, costs, and other operational losses under GDPR and applicable EU Member States and the United Kingdom privacy laws in connection with any measures we take to comply with them. The Swiss Federal Act on Data Protection, or DPA, also applies to the collection and processing of personal data, including health-related information, by companies located in Switzerland, or in certain circumstances, by companies located outside of Switzerland. The DPA has been revised and adopted by Parliament, and the revised version and its revised ordinances are expected to enter into force in 2022. This revised law may result in an increase of costs of compliance, risks of noncompliance and penalties for noncompliance.

These data privacy and security laws impose strict obligations on the ability to process personal data, including health-related information, in particular in relation to their collection, use, disclosure and transfer. This includes several requirements relating to (i) obtaining, in some situations, the consent of the individuals to whom the personal data relates, (ii) the information provided to the individuals about how their personal data is used, (iii) ensuring the security and confidentiality of the personal data, (iv) the obligation to notify regulatory authorities and affected individuals of personal data breaches, (v) extensive internal privacy governance obligations, and (vi) obligations to honor rights of individuals in relation to their personal data (for example, the right to access, correct and delete their personal data). The GDPR prohibits the transfer of personal data to countries outside of the EEA, such as the United States, which are not considered by the European Commission to provide an adequate level of data protection. Switzerland has adopted similar restrictions under the DPA. Although there are legal mechanisms to allow for the transfer of personal data from the EEA and Switzerland to the United States, legal challenges in Europe to the mechanisms allowing companies to transfer personal data

from the EEA to the United States have resulted in further limitations on the ability to transfer personal data across borders. In particular, certain governments have been unable to reach agreement on or maintain existing mechanisms designed to support cross-border data transfers, such as the EU-U.S. and Swiss-U.S. Privacy Shield Frameworks. Specifically, on July 16, 2020, the Court of Justice of the European Union invalidated Decision 2016/1250 on the adequacy of the protection provided by the EU-U.S. Privacy Shield Framework. To the extent that we were to rely on the EU-U.S. Privacy Shield Framework, 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 EU. 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.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial participants, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

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

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 civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the curtailment or restructuring of our operations.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

Coverage and adequate reimbursement may not be available for our current or any future product candidates, which could make it difficult for us to sell profitably, if approved.

Market acceptance and sales of any product candidates that we commercialize, if approved, will depend in part on the extent to which coverage and adequate reimbursement for these drugs and related treatments will be available from third-party payors, including government health administration authorities, managed care organizations and other private health insurers. Third-party payors decide which therapies they will pay for and establish reimbursement levels. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. However, decisions regarding the extent of coverage and

amount of reimbursement to be provided for any product candidates that we develop will be made on a payor-by-payor basis. One third-party payor's determination to provide coverage for a drug does not assure that other payors will also provide coverage, and adequate reimbursement, for the drug. Additionally, a third-party payor's decision to provide coverage for a therapy does not imply that an adequate reimbursement rate will be approved. Each third-party payor determines whether or not it will provide coverage for a therapy, what amount it will pay the manufacturer for the therapy, and on what tier of its formulary it will be placed. The position on a third-party payor's list of covered drugs, or formulary, generally determines the co-payment that a patient will need to make to obtain the therapy and can strongly influence the adoption of such therapy by patients and physicians. Patients who are prescribed treatments for their conditions and providers prescribing such services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our drugs unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our drugs.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. We cannot be sure that coverage and reimbursement will be available for any drug that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Inadequate coverage and reimbursement may impact the demand for, or the price of, any drug for which we obtain marketing approval. If coverage and adequate reimbursement are not available, or are available only to limited levels, we may not be able to successfully commercialize our current and any future product candidates that we develop. Further, coverage policies and third-party payor reimbursement rates may change at any time. Therefore, even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

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

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

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

There remain judicial, Congressional and executive branch challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. By way of example, effective January 1, 2019, for not complying with the ACA's individual mandate to carry health insurance, eliminating the implementation of certain ACA-mandated fees, and increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and, effective January 1, 2021, also eliminated the health insurer tax. 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 legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act (Tax Act). On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling 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. The United States Supreme Court is in the process of reviewing this case but it is unclear when a decision will be made. It is also unclear how such litigation and other efforts, if any, to challenge, repeal, or replace the ACA will impact the ACA or our business.

Other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of 2% per fiscal year pursuant to the Budget Control Act of 2011, which went into effect on April 1, 2013, and due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2021, unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) which ended the use of the statutory formula and established a quality payment program, also referred to as the Quality Payment Program. In November 2019, CMS issued a final rule finalizing the changes to the Quality Payment Program. At this time, it is unclear how the introduction of the Quality Payment Program will impact overall physician reimbursement.

Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which have 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. Although a number of these, and other proposed measures may require additional authorization to become effective, the probability of success of these and any other Trump administration reform initiatives is uncertain, particularly in light of the new incoming Presidential administration.

We cannot predict what healthcare reform initiatives may be adopted in the future, particularly in light of the recent presidential election. We expect that these and 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 drug. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our drugs. Further, it is possible that additional governmental action is taken in response to address the ongoing COVID-19 pandemic.

If any of our current or future product candidates are approved for marketing, and we are found to have improperly promoted off-label uses, or if physicians prescribe or use any of our current or future product candidates off-label, we may become subject to prohibitions on the sale or marketing of any of our current or future product candidates, significant fines, penalties, sanctions, or product liability claims, and our image and reputation within the industry and marketplace could be harmed.

The FDA, DOJ, and comparable foreign authorities strictly regulate the marketing and promotional claims that are made about pharmaceutical products, including our product candidates LP352, LP143 and LP659. In particular, a product may not be promoted for uses or indications that are not approved by the FDA or comparable foreign authorities as reflected in the product's approved labeling. However, if we receive marketing approval for any current or future product candidates, physicians can prescribe such product 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 receive warning letters from the FDA and comparable foreign authorities and become subject to significant liability, which would materially harm our business. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. If we become the target of such an investigation or prosecution based on our marketing and promotional practices, we could face similar sanctions, which would materially harm our business. In addition, management's attention could be diverted from our business operations, significant legal expenses could be incurred, and our reputation could be damaged. The FDA and other governmental authorities have also required that companies enter into consent decrees or permanent injunctions under which specified promotional

conduct is changed or curtailed in order to resolve enforcement actions. If we are deemed by the FDA, DOJ, or other governmental authorities to have engaged in the promotion of any current or future product candidates for off-label use, we could be subject to certain prohibitions or other restrictions on the sale or marketing and other operations or significant fines and penalties, and the imposition of these sanctions could also affect our reputation and position within the industry.

We may not be able to obtain or maintain orphan drug designations or exclusivity for our product candidates, which could limit the potential profitability of our product candidates.

Regulatory authorities in some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and application fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation, however, neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for an indication for which it receives the designation, then the drug is entitled to a period of marketing exclusivity that precludes the applicable regulatory authority from approving another marketing application for the same drug for the same indication for the exclusivity period except in limited situations. For purposes of small molecule drugs, the FDA defines “same drug” as a drug that contains the same active moiety and is intended for the same use as the drug in question. A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation.

We intend to pursue orphan drug designation for our one or more of our product candidates, as well as for potential other future product candidates. Obtaining orphan drug designations is important to our business strategy; however, obtaining an orphan drug designation can be difficult and we may not be successful in doing so. Even if we were to obtain orphan drug designation for a product candidate, we may not obtain orphan exclusivity and that exclusivity may not effectively protect the drug from the competition of different drugs for the same condition, which could be approved during the exclusivity period. Additionally, after an orphan drug is approved, the FDA could subsequently approve another application for the same drug for the same indication if the FDA concludes that the later drug is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusive marketing rights in the United States also may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. The failure to obtain an orphan drug designation for any product candidates we may develop, the inability to maintain that designation for the duration of the applicable period, or the inability to obtain or maintain orphan drug exclusivity could reduce our ability to make sufficient sales of the applicable product candidate to balance our expenses incurred to develop it, which would have a negative impact on our operational results and financial condition.

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

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

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Separately, in response to the global COVID-19 pandemic, on March 10, 2020, the FDA announced its intention to postpone most foreign inspections of manufacturing facilities and products through April 2020, and subsequently, and on March 18, 2020, the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. On July 10, 2020, the FDA announced its intention to restart routine pre-announced surveillance inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA intends to use this risk-based assessment system to identify the categories of regulatory activity that can occur within a given geographic area, ranging from mission critical inspections to resumption of all regulatory activities. 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 or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Risks Related to Our Intellectual Property

We depend on intellectual property licensed from Arena, the termination of which could result in the loss of significant rights, which would harm our business.

We are dependent on technology, patents, know-how, and proprietary materials, both our own and licensed from Arena. We entered into the Arena License Agreement in October 2020 pursuant to which we acquired an exclusive, royalty bearing, sublicensable, worldwide license to develop and commercialize LP352 for any use in humans, LP143 for the treatment of any CNS indication, and LP659 for the treatment of selected CNS indications (pharmaceutical products containing any such compounds, the Licensed Products). Any termination of this license will result in the loss of significant rights and will restrict our ability to develop and commercialize our product candidates. See “Business—License Agreement with Arena” for a description of the Arena License Agreement, which includes a description of the termination provision of this agreement. If we or Arena fails to adequately protect this intellectual property, our ability to commercialize these compounds could suffer.

In addition, agreements under which we license intellectual property or technology to or from third parties may be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. 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. Our business also would suffer if any current or future licensors fail to abide by the terms of the license, if the licensors fail to enforce licensed patents against infringing third parties, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor’s rights.

Furthermore, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

We own or license from third parties certain intellectual property rights necessary to develop our product candidates. The growth of our business will likely depend in part on our ability to acquire or in-license additional proprietary rights, including to advance our research or allow commercialization of our product candidates. In that event, we may be required to expend considerable time and resources to develop or license replacement technology. For example, our programs may involve additional technologies or product candidates that may require the use of additional proprietary rights held by third parties. Furthermore, other pharmaceutical companies and academic institutions may also have filed or are planning to file patent applications potentially relevant to our business. Our product candidates may also require specific formulations or other technology to work effectively and efficiently. These formulations or technology may be covered by intellectual property rights held by others. From time to time, in order to avoid infringing these third-party patents, we may be required to license technology from additional third parties to further develop or commercialize our product candidates. We may be unable to acquire or in-license any relevant third-party intellectual property rights, including any such intellectual property rights required to manufacture, use or sell our product candidates, that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, and as a result we may be unable to develop or commercialize the affected product candidates, and we may have to abandon development of the relevant research programs or product candidates, which would harm our business. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license under such intellectual property rights, any such license may be non-exclusive, which may allow our competitors' access to the same technologies licensed to us.

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in our industry. Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including those relating to:

- 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 license agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- whether we are complying with our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations;
- the priority of invention of patented technology;

- the amount and timing of payments owed under license agreements; and
- the allocation of ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and by us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer.

Furthermore, our existing license agreements impose, and we expect that future license agreements will impose, various diligence, milestone payment, royalty and other obligations on us and if we fail to comply with our obligations under these agreements, including due to the impact of the COVID-19 pandemic on our business operations or our use of the intellectual property licensed to us in an unauthorized manner, or we are subject to a bankruptcy, we may be required to pay damages and the licensor may have the right to terminate the license.

We depend, in part, on our licensors to file, prosecute, maintain, defend, and enforce patents and patent applications that are material to our business.

Patents relating to our product candidates may be controlled by our licensor. Licensors may have rights to file, prosecute, maintain, and defend the patents we have licensed from such licensor. Our ability to settle legal claims may require consent of licensors. If our licensor or any future licensees having rights to file, prosecute, maintain, and defend our patent rights fail to conduct these activities for patents or patent applications covering any of our product candidates, including due to the impact of the COVID-19 pandemic on our licensor's business operations, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using, or selling competing products. We cannot be certain that such activities by our licensor has been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. If our licensor has the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and, even if we are permitted to pursue such enforcement or defense, we cannot ensure the cooperation of our licensor. We cannot be certain that our licensor will allocate sufficient resources or prioritize its or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business. In addition, even when we have the right to control patent prosecution of licensed patents and patent applications, enforcement of licensed patents, or defense of claims asserting the invalidity of those patents, we may still be adversely affected or prejudiced by actions or inactions of our licensor and its counsel that took place prior to or after our assuming control. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners.

Arena has the first right to control the prosecution and bring enforcement actions for infringement by third parties with respect to the licensed patents for the programs licensed to us under the Arena License Agreement, including LP352, LP143 and LP659, for at least a period of time, with input from us. Unsuccessful actions to prosecute the patent applications or to prosecute such patent applications in our best interest could adversely affect our intellectual property rights.

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

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

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

The development and potential commercialization of our product candidates will require substantial additional capital to fund expenses. We may form or seek further strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop, including in territories outside the United States or for certain indications. These transactions can entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. As a result, if we enter into acquisition or in-license agreements or strategic partnerships, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, or if there are materially adverse impacts on our or the counterparty's operations resulting from COVID-19, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction or such other benefits that led us to enter into the arrangement.

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

As a result of these risks, we may not be able to realize the benefit of our existing collaborations or any future collaborations or licensing agreements we may enter into. In addition, there have been a significant number of recent business combinations among large pharmaceutical and biomedical companies that have resulted in a reduced number of potential future collaborators and changes to the strategies of the combined company. As a result, 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 such product candidate, reduce or delay one or more of our other development programs, delay the potential commercialization or reduce the scope of any planned sales or marketing activities for such product candidate, or increase our expenditures and undertake development, manufacturing or commercialization activities at our own expense. If we elect to increase our expenditures to fund development, manufacturing or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

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

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

We may be dependent on intellectual property licensed or sublicensed to us from, or for which development was funded or otherwise assisted by, government agencies, for development of our technology and product candidates. Failure to meet our own obligations to our licensors or upstream licensors, including such government agencies, may result in the loss of our rights to such intellectual property, which could harm our business.

Government agencies may provide funding, facilities, personnel or other assistance in connection with the development of the intellectual property rights owned by or licensed to us. Such government agencies may have retained rights in such intellectual property, including the right to grant or require us to grant mandatory licenses or sublicenses to such intellectual property to third parties under certain specified circumstances, including if it is necessary to meet health and safety needs that we are not reasonably satisfying or if it is necessary to meet requirements for public use specified by federal regulations, or to manufacture products in the United States. Any exercise of such rights, including with respect to any such required sublicense of these licenses could result in the loss of significant rights and could harm our ability to commercialize licensed products.

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

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

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

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our development programs and product candidates. Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our current and any future product candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our current and future development programs and product candidates. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner, including as a result of the COVID-19 pandemic impacting our or our licensors' operations.

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

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

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

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. 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 know with certainty whether we were the first to file for patent protection. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or drugs, in whole or in part, or which effectively prevent others from commercializing competitive technologies and drugs.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. These changes could also increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. On September 16, 2011, the Leahy-Smith America Invents Act (Leahy-Smith Act) was signed into law. When implemented, the Leahy-Smith Act included several significant changes to U.S. patent law that impacted how patent rights could be prosecuted, enforced and defended. In particular, the Leahy-Smith Act also included provisions that switched the United States from a “first-to-invent” system to a “first-to-file” system, allowed third party submission of prior art to the USPTO during patent prosecution and set forth additional procedures to attack the validity of a patent by the USPTO-administered post-grant proceedings. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO developed new regulations and procedures governing the administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, became effective on March 16, 2013. It remains unclear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a negative effect on our business.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or drugs and compete directly with us, without payment to us, or result in our

inability to manufacture or commercialize drugs without infringing third-party patent rights. 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.

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

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

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

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

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned and licensed patents and/or applications and any patent rights we may own or license in the future. We rely on our outside counsel, patent annuity service providers, or our licensing partners to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. government patent agencies require compliance with several procedural, documentary, and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply and we are also dependent on our licensors to take the necessary action to comply with these requirements with respect to our licensed intellectual property. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market and this circumstance could harm our business.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Given the amount of time required for the development, testing and regulatory review of new product candidates such as LP352, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their drug earlier than might otherwise be the case.

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

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business. The following examples are illustrative:

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

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

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a negative impact on the success of our business.

Our commercial success depends, in part, upon our ability and the ability of our current or future collaborators to develop, manufacture, market and sell our current and any future product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. Our product candidates and other proprietary technologies we may develop may infringe existing or future patents owned by third parties. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our current and any future product candidates and technology, including interference proceedings, post grant review and inter partes review before the USPTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, which could have a negative impact on our ability to commercialize our current and any future product candidates. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. If we are found to infringe a third party's valid and enforceable intellectual property rights, we could be required to obtain a license from such third party to continue developing, manufacturing and marketing our product candidate(s) and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product candidate. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. A finding of infringement could prevent us from manufacturing and commercializing our current or any future product candidates or force us to cease some or all of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

Third parties asserting their patent or other intellectual property rights against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates or force us to cease some of our business operations. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and other employee resources from our business, cause development delays, and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties, or redesign our infringing products, which may be impossible on a cost-effective basis or require substantial time and monetary expenditure. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We are aware of third-party patents and/or patent applications that could adversely affect the potential commercialization of our compounds. For example, we are aware of third-party patents, as well as a third-party patent application, with broad claims to administering an S1P receptor modulator by starting with a lower dose and then increasing to a higher, standard daily dose. Further, we are aware of third-party patent applications with broad claims to administering a 5-HT receptor agonist for epileptic disorders. While we do not believe that any such claims that would cover the potential commercialization of LP659 or LP352 would be valid and enforceable, we may be incorrect in this belief.

We may be subject to claims asserting that our employees, consultants or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Certain of our employees, consultants or advisors are currently, or were previously, employed at universities or other biotechnology or pharmaceutical 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 be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property.

We may be involved in lawsuits to protect or enforce our patents, the patents of our licensors or our other intellectual property rights, which could be expensive, time consuming and unsuccessful.

Competitors may infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive, time-consuming, and unpredictable. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our related patent applications at risk of not issuing. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. The initiation of a claim against a third party may also cause the third party to bring counter claims against us such as claims asserting that our patents are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, inter partes review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We

cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. For the patents and patent applications that we have licensed, we may have limited or no right to participate in the defense of any licensed patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates. Such a loss of patent protection could harm our business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and 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. Litigation, interference, derivation or other proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees.

There may be third-party patents of which we are currently unaware with claims to compositions, formulations, methods of manufacture, or methods of use or treatment that cover our product candidates. It is also possible that patents owned by third parties of which we are aware, but which we do not believe are relevant to our product candidates and other proprietary technologies we may develop, could be found to be infringed by our product candidate. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, our competitors in both the United States and abroad, many of which have made substantial investments in patent portfolios and competing technologies, may obtain patents in the future that may prevent, limit or otherwise interfere with our ability to make, use and sell our product candidates, and may claim that use of our technologies or the manufacture, use, or sale of our product candidates infringes upon these patents. We may also receive, and expect to receive, communications from various industry participants alleging our infringement of their patents, trade secrets or other intellectual property rights and/or offering licenses to such intellectual property.

We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in litigation the prevailing party does not offer us a license on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees.

Because of the expense and uncertainty of litigation, we may conclude that even if a third-party is infringing our issued patents, or any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action, which typically last for years before they are concluded, may be too high or not in the best interest of our company or our stockholders, or it may be otherwise impractical or undesirable to enforce our intellectual property against some third parties. Our competitors or other third parties may be able to sustain the costs of complex patent litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. In such cases, we may decide that the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings and that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs, in-license needed technology or other product candidates, or enter into development partnerships that would help us bring our product candidates to market.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there

is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have an adverse effect on the price of our common stock.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable foreign authority.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim we infringe their patents or that the patent covering our product candidate is invalid or unenforceable, or both. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention, or decide that the other party's use of our patented technology falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates and such an outcome may limit our ability to assert our patents against those parties or other competitors and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Such a loss of patent protection could have a material adverse impact on our business. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our current and any future product candidates.

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 actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we have licensed or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions or changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we have licensed or that we may obtain in the future.

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

Filing, prosecuting and defending patents covering our current and any future product candidates throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can have a different scope and strength than do those in the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drugs and, further, may export otherwise infringing drugs to territories where we may obtain patent protection, but where patent enforcement is not as strong as that in the United States. These drugs may compete with our drugs in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, or the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patent and other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore, such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Similarly, if our trade secrets are disclosed in a foreign jurisdiction, competitors worldwide could have access to our proprietary information and we may be without satisfactory recourse. Such disclosure could have a material adverse effect on our business. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. In addition, certain developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. In addition, many countries limit the enforceability of patents against government agencies or government contractors. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

If we rely on third parties to manufacture or commercialize our current or any future product candidates, or if we collaborate with additional third parties for the development of our current or any future product candidates, we must, at times, share trade secrets with them. We may also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development partnerships or similar agreements. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, services agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor’s discovery of our trade secrets or other unauthorized use or disclosure could have an adverse effect on our business and results of operations.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any third-party collaborators. A competitor’s discovery of our trade secrets could harm our business.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce, and any other elements of our product candidates, technology and product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Because we expect to rely on third parties in the development and manufacture of our product candidates, we must, at times, share trade secrets with them. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

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

We may be subject to claims that our employees, consultants, or advisors have wrongfully used or disclosed trade secrets or other confidential information of their current or former employers or claims asserting inventorship or ownership of what we regard as our own intellectual property.

Many of our employees, consultants, and advisors are currently or were previously employed at universities or other healthcare, biotechnology or pharmaceutical 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 be subject to claims that we or these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual’s current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

We may be subject to claims that former employees, collaborators, or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our product candidates or as a result of questions regarding co-ownership of potential joint inventions. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

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

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

One aspect of the determination of patentability of our inventions depends on the scope and content of the "prior art," information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates or their intended uses, and as a result the impact of such third-party intellectual property rights upon the patentability of our own patents and patent applications, as well as the impact of such third-party intellectual property upon our freedom to operate, is highly uncertain. Because patent applications in the United States and most other countries are confidential for typically a period of 18 months after filing, or may not be published at all, we cannot be certain that we were the first to file any patent application related to our product candidates. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Furthermore, for

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

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

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

Risks Related to Our Dependence on Third Parties

Arena currently performs or supports many of our operating activities and will continue to do so after the closing of this offering pursuant to a services agreement, and if we are unable to replicate or replace these functions if this services agreement is terminated, our operations could be adversely affected.

In October 2020, we entered into a services agreement with Arena (Services Agreement). Under this agreement, we receive and anticipate continuing to receive from Arena certain research and development, general administrative, financial and tax, and intellectual property services. Because our company does not yet have sufficient internal capabilities to perform these functions, we are substantially dependent on the Services Agreement for the operation of our company. The term of the Services Agreement will continue until December 31, 2021 and will automatically renew for successive one year terms unless sooner terminated by either party. Arena may terminate the Services Agreement by giving us 180 days' notice prior to June 30, 2021, or 60 days' notice after June 30, 2021.

We expect that our general and administrative expenses will increase substantially for the foreseeable future to support our increased research and development activities and increased costs of operating as a public company and this will require building and developing our internal resources to become less reliant on Arena, prior to the termination of the Services Agreement. Further, if Arena fails to perform its obligations under the Services Agreement, we would be required to build and develop our internal capabilities more quickly than anticipated, and it is possible that we will not be able to do so within the time needed to operate our business effectively.

We do not have our own manufacturing capabilities and will rely on third parties to produce clinical and commercial supplies of our current and any future product candidates. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We have no experience in drug formulation or manufacturing and do not own or operate, and we do not expect to own or operate, facilities for drug manufacturing, storage and distribution, or testing. We will be dependent on third parties to manufacture the clinical supplies of our product candidates.

Further, we also will rely on third-party manufacturers to supply us with sufficient quantities of our product candidates, to be used, if approved, for commercialization. We do not have long-term supply agreements. Furthermore, the raw materials for our product candidates are sourced, in some cases, from a single-source supplier. If we were to experience an unexpected loss of supply of any of our product candidates or any of our future product candidates 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 our products and product candidates 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. Any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates.

Further, our reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including:

- inability to meet our drug specifications and quality requirements consistently;
- delay or inability to procure or expand sufficient manufacturing capacity;
- issues related to scale-up of manufacturing;
- costs and validation of new equipment and facilities required for scale-up;
- failure to comply with cGMP or similar foreign standards;
- inability to negotiate manufacturing agreements with third parties under commercially reasonable terms, if at all;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us;
- reliance on single sources for drug components;
- lack of qualified backup suppliers for those components that are currently purchased from a sole or single source supplier;
- misappropriation of proprietary information, including our trade secrets and know-how;
- the mislabeling of clinical supplies, potentially resulting in the wrong dose amounts being supplied or study 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;
- operations of our third-party manufacturers or suppliers could be disrupted by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier; and
- carrier disruptions or increased costs that are beyond our control.

We do not have complete 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 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 or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates 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 our product candidates, 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 our product candidates or drugs and harm our business and results of operations.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or drugs 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.

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

We do not currently have the ability to independently conduct any clinical trials. We intend to rely on CROs and clinical trial sites to ensure the proper and timely conduct of our preclinical studies and clinical trials, and we expect to have limited influence over their actual performance. We intend to rely upon CROs to monitor and manage data for our clinical programs, as well as the execution of future nonclinical studies. We expect to control only certain aspects of our CROs' activities. Nevertheless, we will be responsible for ensuring that each of our preclinical studies or clinical trials are conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities.

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

While we will have agreements governing their activities, our CROs will not be our employees, and we will not control whether or not they devote sufficient time and resources to our future clinical and nonclinical programs. These CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials, or other drug development activities which could harm our business. We face the risk of potential unauthorized disclosure or misappropriation of our intellectual property by CROs, which may reduce our trade secret protection and allow our potential competitors to access and exploit our proprietary technology. If our CROs do not successfully carry out their contractual duties or obligations, fail

to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for any 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 any product candidate that we develop. As a result, our financial results and the commercial prospects for any product candidate that we develop would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

In addition, quarantines, shelter-in-place, and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to COVID-19 or other infectious diseases could impact personnel at our CROs, which could disrupt our clinical timelines, which could have a material adverse impact on our business, prospects, financial condition, and results of operations.

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

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

Our product candidates may be regulated as controlled substances, the making, use, sale, importation, exportation, and distribution of which are subject to significant regulation by the U.S. Drug Enforcement Administration (DEA) and other regulatory agencies.

Our product candidates may be classified as controlled substances, which are subject to state, federal, and foreign laws and regulations regarding their manufacture, use, sale, importation, exportation, and distribution. Among other things, controlled substances are regulated under the federal Controlled Substances Act of 1970 (CSA), and regulations of the DEA.

The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use and may not be marketed or sold in the United States. A pharmaceutical product may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances. Prior to commercialization, centrally acting drugs are generally subject to review and potential scheduling by the DEA. It is possible that LP352 or our other product candidates may be regulated by the DEA as a Schedule IV controlled substance, which would subject such product candidates to additional restrictions regarding their manufacture, shipment, storage, sale and use, depending on the scheduling of the active ingredients, and may limit the commercial potential of any of our product candidates, if approved. For example, BELVIQ and FINTEPLA are Schedule IV controlled substances.

Various states also independently regulate controlled substances. Though state controlled substances laws often mirror federal law, because the states are separate jurisdictions, they may separately schedule drugs as well. While some states automatically schedule a drug when the DEA does so, in other states there must be rulemaking or a legislative action. State scheduling may delay commercial sale of any controlled substance drug product for

which we obtain federal regulatory approval and adverse scheduling could impair the commercial attractiveness of such product. We or our collaborators must also obtain separate state registrations in order to be able to obtain, handle and distribute controlled substances for clinical trials or commercial sale, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions from the states in addition to those from the DEA or otherwise arising under federal law.

For any of our product candidates classified as controlled substances, we and our suppliers, manufacturers, contractors, customers and distributors are required to obtain and maintain applicable registrations from state, federal and foreign law enforcement and regulatory agencies and comply with state, federal and foreign laws and regulations regarding the manufacture, use, sale, importation, exportation and distribution of controlled substances. There is a risk that DEA regulations may limit the supply of the compounds used in clinical trials for our product candidates, and, in the future, the ability to produce and distribute our products in the volume needed to meet commercial demand. Regulations associated with controlled substances govern manufacturing, labeling, packaging, testing, dispensing, production and procurement quotas, recordkeeping, reporting, handling, shipment and disposal. These regulations increase the personnel needs and the expense associated with development and commercialization of product candidates including controlled substances. The DEA, and some states, conduct periodic inspections of registered establishments that handle controlled substances. Failure to obtain and maintain required registrations or comply with any applicable regulations could delay or preclude us from developing and commercializing our product candidates containing controlled substances and subject us to enforcement action. The DEA may seek civil penalties, refuse to renew necessary registrations or initiate proceedings to revoke those registrations. In some circumstances, violations could lead to criminal proceedings. Because of their restrictive nature, these regulations could limit commercialization of any of our product candidates that are classified as controlled substances.

If we or our third-party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by our third-party manufacturers. Our manufacturers are subject to federal, state, and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical, radioactive and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical, radioactive or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical radioactive or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development, and production efforts, which could harm our business, prospects, financial condition, or results of operations.

Risks Related to Our Business Operations, Employee Matters and Managing Growth

COVID-19 has impacted and could continue to adversely impact our business.

The COVID-19 pandemic continues to rapidly evolve. As a result of the COVID-19 pandemic, we have faced and may continue to face delays in meeting our anticipated timelines for our ongoing and planned clinical trials. Specifically, the initiation of the MAD portion of the Phase 1 clinical trial of LP352 was delayed, in part, as a result of the impact of the COVID-19 pandemic on the clinical site in the United Kingdom that conducted the SAD portion of the Phase 1 clinical trial for LP352, and subsequently we modified the protocol and relocated the MAD portion of such trial to a new clinical site in the United States. The extent to which the COVID-19 pandemic continues to impacts our business, our clinical development and regulatory efforts will depend on future developments that are highly uncertain and cannot be predicted with confidence, such as the duration of the outbreak, travel restrictions, quarantines, social distancing requirements and business closures in the United

States and other countries, and business disruptions, and the effectiveness of actions taken in the United States and other countries to contain and treat the disease. Accordingly, we do not yet know the full extent of potential delays or impacts on our business, our clinical and regulatory activities, healthcare systems or the global economy as a whole. However, these impacts have previously impacted and could in the future adversely affect our business, financial condition, results of operations and growth prospects.

In addition, to the extent the ongoing COVID-19 pandemic adversely affects our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described in this "Risk Factors" section.

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

We are highly dependent on our senior management team. The employment agreements we have with these officers do not prevent such persons from terminating their employment with us at any time. The loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives.

In addition, we will need to attract, retain and motivate highly qualified additional management, clinical and scientific personnel. If we are not able to retain our management and to attract, on acceptable terms, additional qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow.

We may not be able to attract or retain qualified personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses. Many of the other pharmaceutical companies that we compete against for qualified personnel and consultants have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates and consultants than what we have to offer. If we are unable to continue to attract, retain and motivate high-quality personnel and consultants to accomplish our business objectives, the rate and success at which we can discover and develop product candidates and our business will be limited and we may experience constraints on our development objectives.

Our future performance will also depend, in part, on our ability to successfully integrate newly hired executive officers into our management team and our ability to develop an effective working relationship among senior management. Our failure to integrate these individuals and create effective working relationships among them and other members of management could result in inefficiencies in the development and commercialization of our product candidates, harming future regulatory approvals, sales of our product candidates and our results of operations. Additionally, we do not currently maintain "key person" life insurance on the lives of our executives or any of our employees.

We will need to expand our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of February 1, 2021, we had six full-time employees. We currently rely on Arena for certain research and development, general administrative, financial, accounting, tax, intellectual property and other legal services, and we will need to expand our organization to hire qualified personnel to perform these functions internally. Our management may need to divert significant attention and time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational inefficiencies, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of our current and potential

future product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and grow revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance, our ability to commercialize product candidates, develop a scalable infrastructure and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Our employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with FDA regulations or the regulations applicable in other jurisdictions, provide accurate information to the FDA and other regulatory authorities, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct also could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, 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 government 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 negative impact on our business, financial condition, results of operations and prospects, including the imposition of significant fines or other sanctions.

Significant disruptions of our information technology systems or data security incidents could result in significant financial, legal, regulatory, business and reputational harm to us.

We are increasingly dependent on information technology systems and infrastructure, including mobile technologies, to operate our business. In the ordinary course of our business, we collect, store, process and transmit large amounts of sensitive information, including intellectual property, proprietary business information, personal information and other confidential information. It is critical that we do so in a secure manner to maintain the confidentiality, integrity and availability of such sensitive information. We have also outsourced elements of our operations (including elements of our information technology infrastructure) to third parties, and as a result, we manage a number of third-party vendors who may or could have access to our computer networks or our confidential information. In addition, many of those third parties in turn subcontract or outsource some of their responsibilities to third parties. While all information technology operations are inherently vulnerable to inadvertent or intentional security breaches, incidents, attacks and exposures, the accessibility and distributed nature of our information technology systems, and the sensitive information stored on those systems, make such systems potentially vulnerable to unintentional or malicious, internal and external attacks on our technology environment. In addition, due to the COVID-19 pandemic, we have enabled all of our employees to work remotely, which may make us more vulnerable to cyberattacks. Potential vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, business partners, or by malicious third parties. Attacks of this nature are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives (including, but not limited to, industrial espionage) and expertise, including organized criminal groups, “hacktivists,” nation states and others. In addition to the extraction of sensitive information, such attacks could include 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. In addition, the prevalent use of mobile devices increases the risk of data security incidents.

Significant disruptions of our, our third-party vendors' and/or business partners' information technology systems or other similar data security incidents could adversely affect our business operations and/or result in the loss, misappropriation, and/or unauthorized access, use or disclosure of, or the prevention of access to, sensitive information, which could result in financial, legal, regulatory, business and reputational harm to us. In addition, information technology system disruptions, whether from attacks on our technology environment or from computer viruses, natural disasters, terrorism, war and telecommunication and electrical failures, could result in a material disruption of our development programs and our business operations. 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 data. Additionally, theft of our intellectual property or proprietary business information could require substantial expenditures to remedy. If we or our third-party collaborators, consultants, contractors, suppliers, or service providers were to suffer an attack or breach, for example, that resulted in the unauthorized access to or use or disclosure of personal or health information, we may have to notify consumers, partners, collaborators, government authorities, and the media, and may be subject to investigations, civil penalties, administrative and enforcement actions, and litigation, any of which could harm our business and reputation.

There is no way of knowing with certainty whether we have experienced any data security incidents that have not been discovered. While we have no reason to believe this to be the case, attackers have become very sophisticated in the way they conceal access to systems, and many companies that have been attacked are not aware that they have been attacked. Any event that leads to unauthorized access, use or disclosure of personal information, including but not limited to personal information regarding our patients or employees, could disrupt our business, harm our reputation, compel us to comply with applicable federal and/or state breach notification laws and foreign law equivalents, subject us to time consuming, distracting and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us, and result in significant legal and financial exposure and/or reputational harm. In addition, any failure or perceived failure by us or our vendors or business partners to comply with our privacy, confidentiality or data security-related legal or other obligations to third parties, or any further security incidents or other inappropriate access events that result in the unauthorized access, release or transfer of sensitive information, which could include personally identifiable information, may result in governmental investigations, enforcement actions, regulatory fines, litigation, or public statements against us by advocacy groups or others, and could cause third parties, including clinical sites, regulators or current and potential partners, to lose trust in us or we could be subject to claims by third parties that we have breached our privacy- or confidentiality-related obligations, which could materially and adversely affect our business and prospects. Moreover, data security incidents and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures intended to protect our information technology systems and infrastructure, there can be no assurance that such measures will successfully prevent service interruptions or security incidents.

Risks Related to This Offering and Ownership of 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 there has been no public market for shares of our common stock. Although we have applied to list our common stock on the Nasdaq Global Market (Nasdaq) an active trading market for our shares may never develop or be sustained following this offering. You may not be able to sell your shares quickly or at the market price if trading in shares of our common stock is not active. The initial public offering price for our common stock will be determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of our common stock after the offering. 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.

Further, 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 partnerships or acquire companies or products 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 could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- the commencement, enrollment or results of our ongoing and planned preclinical studies and clinical trials, or any future pre-clinical studies or clinical trials, we may conduct of our current and any future product candidates, or changes in the development status of our current and any future product candidates;
- any delay in our regulatory filings for our current and any future product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- adverse results or delays in our preclinical studies and clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial, or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval for our current and any future product candidates;
- changes in laws or regulations applicable to our current and any future product candidates, including but not limited to clinical trial requirements for approvals;
- the failure to obtain coverage and adequate reimbursement of our current and any future product candidates, if approved;
- changes on the structure of healthcare payment systems;
- any changes to our relationship with any manufacturers, suppliers, licensors, future collaborators or other strategic partners;
- our inability to obtain adequate product supply for any approved drug product or inability to do so at acceptable prices;
- our inability to establish collaborations if needed;
- our failure to commercialize our current and any future product candidates;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of our current and any future product candidates;
- introduction of new products or services offered by us or our competitors, or the release or publication of clinical trial results from competing product candidates;
- announcements of significant acquisitions, strategic partnerships, joint ventures, or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;

- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- issuances of debt or equity securities;
- sales of our common stock by us or our stockholders in the future, including sales of our common stock by Arena, or the perception that such sales may occur;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- general political and economic conditions, including the COVID-19 pandemic; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. 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 would therefore be limited to the appreciation, if any, of their stock.

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, current directors, greater than 5% holders, and their affiliates beneficially owned approximately 93.3% of our common stock as of December 31, 2020, assuming the automatic conversion of all 5,600,000 outstanding shares of our Series A preferred stock into 7,728,000 shares of our common stock upon the closing of this offering and giving no effect to the Exchange. Upon the closing of this offering, that same group will hold approximately 57.3% of our outstanding common stock, assuming (i) the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock pursuant to the Exchange, (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock, and (iii) the sale of 5,000,000 shares of common

stock in this offering. Therefore, even after this offering, these stockholders will have the ability to 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.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price is substantially higher than the net tangible book value per share of our voting and non-voting common stock. Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of $7.93 per share, based on the assumed initial public offering price of $15.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Further, investors purchasing common stock in this offering will contribute approximately 57.3% of the total amount invested by stockholders since our inception, but will own only approximately 30.0% of the shares of voting and non-voting common stock outstanding after giving effect to this offering.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less when they purchased their shares than the price offered to the public in this offering and the exercise of stock options granted to our employees. To the extent outstanding options are exercised, there will be further dilution to new investors. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. For a further description of the dilution that you will experience immediately after this offering, see the section entitled “Dilution.”

The dual class structure of our common stock may limit your ability to influence corporate matters and may limit your visibility with respect to certain transactions.

The dual class structure of our common stock may limit your ability to influence corporate matters. Holders of our common stock are entitled to one vote per share, while holders of our non-voting common stock are not entitled to any votes. Nonetheless, each share of our non-voting common stock may be converted at any time into one share of our common stock at the option of its holder by providing written notice to us, subject to the limitations provided for in our amended and restated certificate of incorporation to become effective upon the closing of this offering. Consequently, if holders of our non-voting common stock following this offering exercise their option to make this conversion, this will have the effect of increasing the relative voting power of those prior holders of our non-voting common stock, and correspondingly decreasing the voting power of the holders of our common stock, which may limit your ability to influence corporate matters. Additionally, stockholders who hold, in the aggregate, more than 10% of our common stock and non-voting common stock, but 10% or less of our common stock, and are not otherwise an insider, may not be required to report changes in their ownership due to transactions in our non-voting common stock pursuant to Section 16(a) of the Exchange Act, and may not be subject to the short-swing profit provisions of Section 16(b) of the Exchange Act.

Sales of a substantial number of shares of our common stock by our existing stockholders, including Arena, in the public market, or the perception that such sales could occur, could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline. Based on shares of common stock outstanding as of

December 31, 2020, upon the closing of this offering we will have outstanding a total of 13,287,590 shares of common stock, which does not include the shares of our non-voting common stock that may be converted into an aggregate of 3,629,400 shares of our common stock. Of these shares, only the shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable without restriction in the public market immediately following this offering.

In addition, immediately following the closing of this offering, Arena will own 29.9% of our outstanding shares of common stock (or 28.3% if the underwriters exercise their option to purchase additional shares in full) or 23.5% of our common stock if all of our non-voting common stock is converted into 3,629,400 shares of our common stock (or 22.5% if the underwriters exercise their option to purchase additional shares in full). Subject to the restrictions described in the paragraph below, future sales of these shares in the public market will be subject to the volume and other restrictions of Rule 144 under the Securities Act for so long as Arena is deemed to be our affiliate, unless the shares to be sold are registered with the SEC. The sale by Arena of a substantial number of shares after this offering, or a perception that such sales could occur, could significantly reduce the market price of our common stock.

We expect that the lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus. After the lock-up agreements expire, up to an additional 11,916,990 shares of common stock will be eligible for sale in the public market (which number of shares includes the up to 3,629,400 shares of common stock issuable upon conversion our non-voting common stock), of which shares are held by directors, executive officers, and other affiliates and will be subject to volume limitations under Rule 144 under the Securities Act. In addition, shares of common stock that are either subject to outstanding options or reserved for future issuance under our employee benefit plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

After this offering, the holders of 7,728,000 shares of our common stock (including the shares of common stock issuable upon conversion of our non-voting common stock) will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the 180-day lock-up agreements described above. See the section entitled "Description of Capital Stock—Registration Rights." Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

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

If any of our existing stockholders and their affiliated entities purchase shares of our common stock in this offering, such purchases would reduce the available public float of our common stock because such purchasers would be restricted from selling such shares during the 180-day period following this offering and thereafter would be subject to volume limitations pursuant to restrictions under applicable securities laws. As a result, any purchase of shares of our common stock by our existing stockholders and their affiliated entities in this offering will reduce the liquidity of our common stock relative to what it would have been had these shares been purchased by investors that were not our stockholders.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that we will need significant additional capital in the future to continue our planned operations, including conducting clinical trials, commercialization efforts if we are able to obtain marketing approval of any of our current or future product candidates, research and development activities, and costs associated with

operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our 2021 Plan, our management is authorized to grant stock options to our employees, directors and consultants. Additionally, the number of shares of our common stock reserved for issuance under our 2021 Plan will automatically increase on January 1 of each year, beginning on January 1, 2022 and continuing through and including January 1, 2031, by 5% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year (determined on an as-converted to voting common stock basis, without regard to any limitations on the conversion of the non-voting common stock), or a lesser number of shares determined by our board of directors.

In addition, pursuant to our ESPP, the number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2022 (through January 1, 2031), by the lesser of (i) 1% of the total number of shares of our common stock outstanding (determined on an as-converted to voting common stock basis, without regard to any limitations on the conversion of the non-voting common stock) on the last day of the fiscal year before the date of the automatic increase and (ii) such number of shares of common stock that would cause the aggregate number of shares of common stock then reserved for issuance under the ESPP to equal 1,060,017 shares; provided that before the date of any such increase, our board of directors may determine that such increase will be for a lesser amount of shares. Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

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

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section entitled “Use of Proceeds,” and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment. The failure by our management to apply these funds effectively could harm our business. We intend to invest the net proceeds to us from the offering that are not used as described above in short- and medium-term, investment-grade, interest-bearing instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

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

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until December 31, 2026, although circumstances could cause us to lose that status earlier, including if we become a

"large accelerated filer" as defined in Rule 12b-2 under the Exchange Act or if we have total annual gross revenue of $1.07 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31 or, if we issue more than $1.0 billion in non-convertible debt during any three year period before that time, we would cease to be an emerging growth company immediately. 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 exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. Investors may 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.

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 from new or revised accounting standards, and therefore we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

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

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the closing of this offering could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective upon the closing of this offering, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws will:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that our board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66-2/3% of the voting power of all of our then-outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;

- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the chair of our board of directors, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors; and
- provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under state, statutory and common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine, 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; provided these provisions of our amended and restated certificate of incorporation and amended and restated bylaws will not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction; and provided that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended (Securities Act), including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional or entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then-outstanding common stock.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay

or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

For information regarding these and other provisions, see "Description of Capital Stock."

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America 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 will provide that, to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants, 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 or proceeding asserting a breach of fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders;
- any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or bylaws;
- any action or proceeding to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws;
- any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and
- any action asserting a claim against us or any of our directors, officers or other employees that is governed by the internal affairs doctrine.

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 of America 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.

These exclusive forum provisions 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.

General Risk Factors

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

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

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

If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

Pursuant to Section 404 of Sarbanes-Oxley, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with the annual report for our fiscal year ending December 31, 2022. When we lose our status as an "emerging growth company" and reach an accelerated filer threshold, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for our management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. In addition, we currently rely on Arena for certain financial and accounting services. To comply with the requirements of being a reporting company under the Exchange Act, we will need to upgrade our information technology systems; implement additional financial and management controls, reporting systems and procedures; and hire additional accounting and finance staff. If we or, if required, our auditors are unable to conclude that our internal control over financial reporting is effective, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begin its Section 404 reviews, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our failure to meet Nasdaq's continued listing requirements could result in a delisting of our common stock.

If, after listing, we fail to satisfy the continued listing requirements of Nasdaq, such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with the listing requirements of Nasdaq.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements about us and our industry. 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, research and development costs, the anticipated timing, costs and conduct of our IND-enabling studies and clinical trials for our product candidates, the timing and likelihood of regulatory filings and approvals for our product candidates, our ability to commercialize our product candidates, if approved, the pricing and reimbursement of our product candidates, if approved, the potential benefits of strategic collaborations and our ability to enter into strategic arrangements, timing and likelihood of success, plans and objectives of management for future operations, and future results of anticipated products are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. 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 under the sections in this prospectus entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, 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. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See the section entitled “Where You Can Find Additional Information.”

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this prospectus, and while we believe such information provides a reasonable basis for these statements, such information may be limited or incomplete. 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 on 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 are 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 are 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 are 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 entitled “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 $67.4 million (or approximately $77.9 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 $15.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share would increase (decrease) the net proceeds to us from this offering by approximately $4.7 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. Similarly, each increase (decrease) of 1.0 million shares in the number of shares of common stock offered by us would increase (decrease) the net proceeds to us from this offering by approximately $14.0 million, assuming the initial public offering price of $15.00 per share remains the same, and after deducting underwriting discounts and commissions.

We anticipate that we will use the net proceeds of this offering, together with our existing cash and cash equivalents, as follows:

- approximately $21.0 million to $25.0 million to fund our development of LP352, including through the completion of our planned Phase 1b/2a clinical trial in DEEs;
- approximately $9.0 million to $12.0 million to fund our development of LP143 for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including through the completion of a Phase 1 clinical trial;
- approximately $7.0 million to $10.0 million to fund our development of LP659 across a range of CNS disorders associated with neuroinflammation; and
- the remainder for additional discovery and preclinical development of additional product candidates and potential additional development of our existing product candidates, as well as headcount costs, working capital and other general corporate purposes.

We may also use a portion of the remaining net proceeds from this offering 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. It is difficult to predict the cost and timing required to complete our clinical trials due to, among other factors, our lack of experience as a company with initiating and conducting clinical trials, filing requirements with and feedback from various regulatory agencies, the rate of patient enrollment in our planned clinical trials, clinical trial results, any impacts from the COVID-19 pandemic, and the actual costs of manufacturing and supplying our product candidates.

Our expected use of the net 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 all of our product candidates through regulatory approval, and we will need to raise additional capital to complete the development and commercialization of all of our product candidates.

The amounts and timing of our actual expenditures will depend on numerous factors, including the time and cost necessary to conduct clinical trials and preclinical studies, the results of such trials and studies, and other factors described in the section entitled "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, and we will have broad discretion in the application of the net proceeds.

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- and medium-term, investment-grade, interest-bearing instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

Since inception, we have never declared or paid any cash dividends on our capital stock, and 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 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.

CAPITALIZATION

The following table sets forth our cash and capitalization as of December 31, 2020:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the Exchange, and the related reclassification of the carrying value of the shares of Series A preferred stock exchanged in the Exchange to permanent equity, (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock, and the related reclassification of the carrying value of such shares of our Series A preferred stock to permanent equity, which will occur upon the closing of this offering, and (iii) the filing and effectiveness of our amended and restated certificate of incorporation that will be in effect upon the closing of this offering; and
- on a pro forma as adjusted basis, giving effect to (i) the pro forma adjustments set forth above and (ii) our receipt of net proceeds from the sale of 5,000,000 shares of common stock in the offering at the assumed initial public offering price of $15.00 per share, after deducting the 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 "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.

	As of December 31, 2020		
	Actual	Pro Forma	Pro Forma, As Adjusted[1]
	(in thousands, except share and per share amounts) (unaudited)		
Cash	$ 55,316	$ 55,316	$122,716
Series A convertible preferred stock, $0.0001 par value; 5,600,000 shares authorized, issued and outstanding, actual; and no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	$ 55,795	$ —	$ —
Stockholders' equity (deficit):			
Preferred stock, $0.0001 par value; no shares authorized, issued, and outstanding, actual, and 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, $0.0001 par value; 10,500,000 shares authorized, 4,188,990 shares issued and outstanding, including 348,450 shares subject to repurchase, actual, 300,000,000 shares authorized, 8,287,590 shares issued and outstanding, including 348,450 shares subject to repurchase, pro forma; 300,000,000 shares authorized, 13,287,590 shares issued and outstanding, pro forma as adjusted	—	—	1
Non-voting common stock, $0.0001 par value—no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, pro forma and pro forma as adjusted; 3,629,400 shares issued and outstanding, pro forma and pro forma as adjusted	—	—	—
Additional paid-in capital	11,708	67,502	134,026
Accumulated deficit	(14,400)	(14,400)	(14,400)
Total stockholders' equity (deficit)	(2,692)	53,103	119,627
Total capitalization	$ 53,103	$ 53,103	$119,627

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share would increase (decrease) each of our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity and total capitalization by approximately $4.7 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. 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, additional paid-in capital, total stockholders' equity and total capitalization by approximately $14.0 million, assuming the assumed initial public offering price of $15.00 per share remains the same, and after deducting the underwriting discounts and commissions.

If the underwriters' option to purchase additional shares of our common stock from us is exercised in full, pro forma as adjusted cash, additional paid-in capital, total stockholders' equity (deficit), total capitalization and shares of common stock outstanding as of December 31, 2020 would be $133.2 million, $144.5 million, $130.1 million, $130.1 million and 14,037,590, respectively.

The number of shares of our common stock and non-voting common stock to be outstanding immediately after this offering, pro forma and pro forma as adjusted, reflected in the table above is based on 11,916,990 shares of our common stock and non-voting common stock outstanding as of December 31, 2020, after giving effect to (i) the Exchange and (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering, and excludes:

- 873,264 shares of our common stock issuable upon the exercise of outstanding stock options as of December 31, 2020, with a weighted-average exercise price of $3.42 per share;
- 194,269 shares of our common stock issuable upon the exercise of outstanding stock options granted after December 31, 2020, with a weighted average exercise price of $8.46 per share;
- 1,766,699 shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering, as well as any automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan and any shares underlying outstanding stock awards granted under our 2020 Plan that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section entitled "Executive Compensation—Equity Incentive Plans";
- 353,339 shares of our common stock reserved for issuance under our ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering, and any automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP; and
- 110,933 shares of our common stock issuable upon the exercise of stock options to be granted to certain of our directors and employees under our 2021 Plan, contingent and effective upon the effectiveness of the registration statement of which this prospectus forms a part, with an exercise price per share that is equal to the price per share at which our common stock is first sold to the public in this offering.

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 December 31, 2020, we had a historical net tangible book value (deficit) of $(3.57) million, or $(0.85) per share of common stock based on 4,188,990 shares of common stock, including 348,450 shares subject to repurchase, and no shares of non-voting common stock outstanding as of such date. Our historical net tangible book value (deficit) per share represents total tangible assets less total liabilities and Series A preferred stock, which is not included within permanent equity, divided by the number of shares of common stock outstanding at December 31, 2020.

Our pro forma net tangible book value as of December 31, 2020 was $52.2 million, or $4.38 per share, after giving effect to (i) the Exchange, and the related reclassification of the carrying value of the shares of Series A preferred stock exchanged in the Exchange to permanent equity, (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock, and the related reclassification of the carrying value of such shares of our Series A preferred stock to permanent equity, which will occur upon the closing of this offering, and (iii) the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering.

After giving effect to the sale by us of 5,000,000 shares of common stock in this offering at the assumed initial public offering price of $15.00 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 December 31, 2020 would have been $119.6 million, or $7.07 per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of $2.69 per share to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value of $7.93 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		$15.00
Historical net tangible book value (deficit) per share as of December 31, 2020	$(0.85)	
Pro forma increase in historical net tangible book value (deficit) per share attributable to the pro forma transactions described in the preceding paragraphs	5.23	
Pro forma net tangible book value per share as of December 31, 2020	4.38	
Increase in pro forma as adjusted net tangible book value per share attributable to investors purchasing shares in this offering	2.69	
Pro forma as adjusted net tangible book value per share after this offering		7.07
Dilution in pro forma as adjusted net tangible book value per share to investors purchasing shares in this offering		$ 7.93

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 in the assumed initial public offering price of $15.00 per share would increase our pro forma as adjusted net tangible book value after this offering by $0.28 per share and dilution to new investors purchasing shares in this offering by $0.72 per share, 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 the underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each $1.00 decrease in the assumed initial public offering price of $15.00 per share would decrease our pro forma as adjusted net tangible book value after this offering by $0.27 per share and dilution to new investors purchasing shares in this offering by $0.73 per share, 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 the underwriting discounts and commissions and estimated offering expenses payable by us.

We may also increase or decrease the number of shares we are offering. Similarly, each increase of 1,000,000 shares in the number of shares of common stock offered by us would increase our pro forma as adjusted net tangible book value by $0.39 per share and decrease the dilution to investors purchasing shares in this offering by $0.39 per share, in each case assuming the assumed initial public offering price of $15.00 per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Each decrease of 1,000,000 shares in the number of shares of common stock offered by us would decrease our pro forma as adjusted net tangible book value by $0.43 per share and increase the dilution to investors purchasing shares in this offering by $0.43 per share, in each case assuming the assumed initial public offering price of $15.00 per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

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 $7.36 per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be $7.64 per share.

The foregoing discussion and table above (other than the historical net tangible book value (deficit) calculation) are based on 11,916,990 shares of our common stock and non-voting common stock outstanding as of December 31, 2020, after giving effect to (i) the Exchange and (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering, and excludes:

- 873,264 shares of our common stock issuable upon the exercise of outstanding stock options as of December 31, 2020, with a weighted-average exercise price of $3.42 per share;
- 194,269 shares of our common stock issuable upon the exercise of outstanding stock options granted after December 31, 2020, with a weighted average exercise price of $8.46 per share;
- 1,766,699 shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering, as well as any automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan and any shares underlying outstanding stock awards granted under our 2020 Plan that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section entitled “Executive Compensation—Equity Incentive Plans”;
- 353,339 shares of our common stock reserved for issuance under our ESPP, which will become upon the execution and delivery of the underwriting agreement for this offering, and any automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP; and
- 110,933 shares of our common stock issuable upon the exercise of stock options to be granted to certain of our directors and employees under our 2021 Plan, contingent and effective upon the effectiveness of the registration statement of which this prospectus forms a part, with an exercise price per share that is equal to the price per share at which our common stock is first sold to the public in this offering.

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.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations, and intentions. As a result of many factors, including those set forth in the section of this prospectus entitled "Risk Factors," our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. Please also see the section of this prospectus entitled "Special Note Regarding Forward-Looking Statements."

Overview

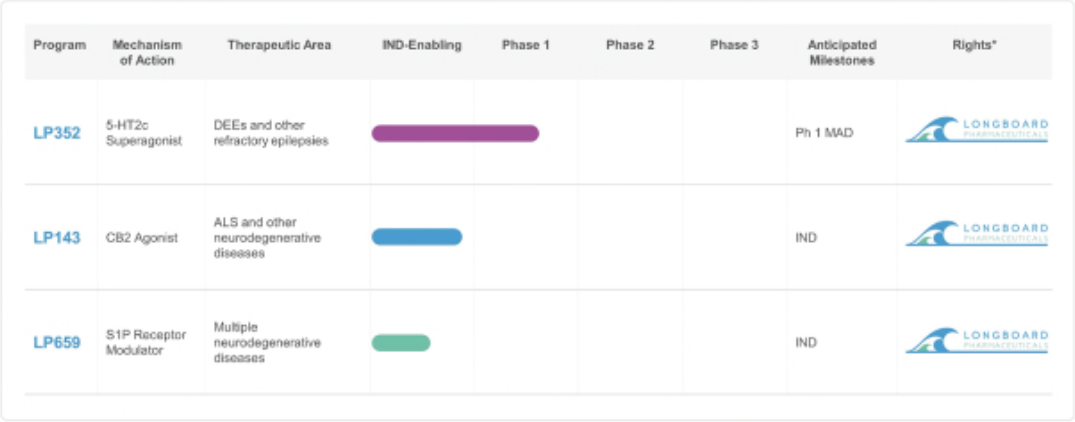
We are a clinical-stage biopharmaceutical company focused on developing novel, transformative medicines for neurological diseases. We were formed in January 2020 by Arena to advance a portfolio of centrally acting product candidates designed to be highly selective for specific GPCRs. Our small molecule product candidates were discovered out of the same platform at Arena that represents a culmination of more than 20 years of GPCR research. Our pipeline includes:

- LP352, an oral, centrally acting, 5-HT2c superagonist, that we are advancing in a MAD portion of a Phase 1 clinical trial and expect to initiate a Phase 1b/2a clinical trial for the treatment of DEEs, including Dravet syndrome and Lennox-Gastaut syndrome, among others, in the first quarter of 2022;
- LP143, a centrally acting, full CB2 agonist in IND-enabling studies for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including ALS; and
- LP659, a centrally acting, S1P1,5 receptor modulator in IND-enabling studies for CNS neuroinflammatory diseases.

We also have additional earlier discovery stage compounds.

In October 2020, we entered into the Arena License Agreement, pursuant to which Arena granted us an exclusive, royalty bearing, sublicensable, worldwide license to develop and commercialize LP352, LP143 and LP659 (pharmaceutical products containing any such compounds, the Licensed Products).

The following table provides an overview of our current programs:



* We hold worldwide rights to our product candidates in our therapeutic areas of focus for such compounds through the Arena License Agreement.

We were incorporated in January 2020. 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, in-licensing intellectual property rights and establishing our intellectual property portfolio, and providing general and administrative support for these operations. We have principally financed our operations to date through capital contributions from Arena and a private placement of our Series A preferred stock. In October 2020, we received aggregate gross proceeds of $56.0 million from the sale and issuance of 5,600,000 shares of our Series A preferred stock. As of December 31, 2020, we had cash of $55.3 million.

Based on our current operating plan, we estimate that the net proceeds from this offering and our existing cash and cash equivalents will be sufficient to fund our operating expenses and capital expenditure requirements through at least the next 24 months. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect. We have incurred net losses and negative cash flows from operations since our inception and expect to continue to incur significant and increasing operating losses for the foreseeable future. We do not have any products approved for sale, we have not generated any revenue from the sale of products, and our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and eventual commercialization of one or more of our current or future product candidates. Our net losses were $14.4 million for the period from January 3, 2020 (inception) through December 31, 2020. Included in our net loss for the period from January 3, 2020 (inception) through December 31, 2020 was a one-time expense of $7.4 million related to the acceleration of vesting and the extension of the exercise period for Mr. Lind's equity awards outstanding at Arena. As of December 31, 2020, we had an accumulated deficit of $14.4 million.

We anticipate that our expenses will increase substantially for the foreseeable future, particularly if and as we continue to invest in our research and development activities, including conducting preclinical studies, submit INDs and conduct clinical trials for our current and future product candidates, seek marketing approvals for any product candidates that successfully complete clinical trials, expand our product pipeline, hire additional personnel and invest in and grow our business, obtain, expand, maintain, enforce and protect our intellectual property portfolio, seek regulatory approvals for our product candidates, establish a sales, marketing and distribution infrastructure and establish manufacturing capabilities, whether alone or with third parties, to commercialize product candidates for which we may obtain regulatory approval, if any, begin to commercialize any approved products, and experience any delays or encounter any issues with any of the above, including but not limited to failed studies, negative or mixed clinical trial results, safety issues or other regulatory challenges, the risk of which in each case may be exacerbated by the ongoing COVID-19 pandemic. In addition, following the closing of this offering, we expect to incur additional expenses associated with operating as a public company and in building our internal resources to become less reliant on Arena, including those related to audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor and public relations costs. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on a variety of factors. As a result, we will need substantial additional financing to support our continuing operations and further the development of and commercialize our product candidates. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through public or private equity or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we are unable to raise capital or enter into such agreements as and when needed, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. 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. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic or otherwise. Because of the numerous risks and uncertainties associated with product

development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate revenue from product sales, we may not become profitable.

We do not own or operate manufacturing facilities for the production of our product candidates or other product candidates that we may develop, nor do we have plans to develop our own manufacturing operations in the foreseeable future. We currently depend on third-party contract manufacturers for all of our required raw materials, active pharmaceutical ingredient and finished products for our clinical trials. We do not have any current contractual arrangements for the manufacture of commercial supplies of our product candidates. Prior to our receipt of any approval from the FDA, if at all, we intend to enter into agreements for commercial production of our product candidates with third party suppliers. We currently employ internal resources and third-party consultants to manage our manufacturing contractors.

The global COVID-19 pandemic continues to rapidly evolve. As a result of the COVID-19 pandemic, we have faced and may continue to face delays in meeting our anticipated timelines for our ongoing and planned clinical trials. Specifically, the initiation of the MAD portion of the Phase 1 clinical trial of LP352 was delayed, in part, as a result of the impact of the COVID-19 pandemic on the clinical site in the United Kingdom that conducted the SAD portion of the Phase 1 clinical trial for LP352, and subsequently we modified the protocol and relocated the MAD portion of such trial to a new clinical site in the United States. The extent of the impact of COVID-19 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 COVID-19 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.

Agreements with Arena

Below is a summary of the key terms for our license and other agreements with Arena. For a more detailed description of these agreements, see the sections of this prospectus entitled “Business—License Agreement with Arena” and “Certain Relationships and Related Person Transactions—Agreements with Arena.”

License Agreement

In October 2020, we entered into the Arena License Agreement, pursuant to which we obtained an exclusive, worldwide license of certain intellectual property for the Licensed Products. As consideration for the rights granted to us under the Arena License Agreement, we will be required to pay to Arena a mid-single digit royalty on net sales of Licensed Products of LP352, and a low-single digit royalty on net sales of all other Licensed Products, by us, our affiliates or our sublicensees, subject to standard reductions. Our royalty obligations continue on a Licensed Product-by-Licensed Product and country-by-country basis until the later of the (i) tenth anniversary of the first commercial sale of such product in such country or (ii) expiration of the last-to-expire valid claim of the patents licensed to us under the Arena License Agreement covering the manufacture, use or sale of such product in such country.

Royalty Purchase Agreement

In October 2020, we entered into a Royalty Purchase Agreement with Arena and 356 Royalty Inc., a wholly owned subsidiary of Arena (356 Royalty), pursuant to which we purchased the right to receive all milestone

payments, royalties, interest and other payments relating to net sales of lorcaserin, in all countries and territories of the world (Territory) owed or otherwise payable to 356 Royalty by Eisai pursuant to a Transaction Agreement dated December 28, 2016, as amended (Transaction Agreement), by and among 356 Royalty and Eisai, for an upfront payment of approximately $121,000. For a more detailed description of the Transaction Agreement, see the section of this prospectus entitled “Certain Relationships and Related Person Transactions—Agreements with Arena.” Lorcaserin is currently in a Phase 3 clinical trial for Dravet syndrome.

Services Agreement

In October 2020, we entered into the Services Agreement under which Arena agreed to perform certain research and development services, general administrative services, management services and other mutually agreed services for us and receive service fees therefor on an hourly rate based on an annual full time equivalent rate agreed upon by the parties.

Components of Our Results of Operations

Operating Expenses

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

Research and Development

Our research and development expenses consist primarily of direct and indirect costs incurred in connection with the preclinical and clinical development of our product candidates.

Direct costs include:

- external research and development expenses incurred under agreements with Arena, CROs, investigative sites, and consultants to conduct our preclinical studies and clinical trials; and
- costs related to manufacturing our product candidates for preclinical studies and clinical trials, including fees paid to third-party manufacturers.

Indirect costs include:

- personnel-related costs, which include salaries, payroll taxes, employee benefits, and other employee-related costs, including stock-based compensation, for personnel engaged in research and development functions; and
- facilities and other various expenses.

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. We track direct costs by stage of program, clinical or preclinical. However, we do not track indirect costs on a program specific or stage of program basis because these costs are deployed across multiple programs and, as such, are not separately classified.

As described above, Arena charges us for many of the expenses associated with these research and development functions under the Services Agreement. We expect to assume responsibility from Arena for these research and development functions as we continue to grow our business and build our internal research and development capabilities. We expect that our research and development expenses will increase substantially for the foreseeable future as we continue the development of our product candidates, particularly as product candidates in later stages of development generally have higher development costs than those in earlier stages of development. We cannot determine with certainty the timing of initiation, the duration or the completion costs of

future clinical trials and preclinical studies of our product candidates due to the inherently unpredictable nature of clinical and preclinical development. Clinical and preclinical 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 and development programs to pursue and how much funding to direct to each product candidate or program on an ongoing basis in response to the results of ongoing and future preclinical studies and clinical trials, regulatory developments and our ongoing assessments as to each product candidate's commercial potential. We will need to raise substantial additional capital in the future. In addition, we cannot forecast which product candidates 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.

Our research and development expenses may vary significantly based on a variety of factors, such as:

- the scope, rate of progress, expense and results of our preclinical development activities;
- the phase of development of our product candidates;
- per patient clinical trial costs;
- the number of clinical trials required for approval;
- the number of sites included in our ongoing and planned clinical trials;
- the number of patients that participate in our ongoing and planned clinical trials;
- the countries in which our clinical trials are conducted;
- uncertainties in clinical trial design and patient enrollment or drop out or discontinuation rates, particularly in light of the current COVID-19 pandemic environment;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in our ongoing and planned clinical trials and follow-up;
- the efficacy and safety profile of our product candidates;
- the timing, receipt, and terms of any approvals from applicable regulatory authorities including the FDA and foreign regulatory authorities;
- significant and changing government regulation and regulatory guidance;
- potential additional trials requested by regulatory agencies;
- the cost and timing of manufacturing our product candidates;
- establishing clinical and commercial manufacturing capabilities or making arrangements with third-party manufacturers in order to ensure that we or our third-party manufacturers are able to make product successfully;
- the extent to which we establish additional strategic collaborations or other arrangements;
- the impact of any business interruptions to our operations or to those of the third parties with whom we work, including Arena, particularly in light of the current COVID-19 pandemic environment; and
- maintaining a continued acceptable safety profile of our product candidates following approval, if any, of our product candidates.

A change in the outcome of any of these variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, which include salaries, payroll taxes, employee benefits, and other employee-related costs, including stock-based compensation, for personnel in executive, finance and other administrative functions. In 2020, we incurred a one-time expense of $7.4 million related to the acceleration of vesting and the extension of the exercise period for Mr. Lind's equity awards outstanding at Arena. Other significant costs include legal fees relating to corporate matters, professional fees for accounting and consulting services and facility-related costs.

We expect that our ongoing general and administrative expenses will increase substantially for the foreseeable future to support our increased research and development activities and increased costs of operating as a public company and in building our internal resources to become less reliant on Arena. These increased costs will include increased expenses related to audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor and public relations costs associated with operating as a public company.

Results of Operations

Period from January 3, 2020 (Inception) through December 31, 2020

The following table summarizes our results of operations for the period from January 3, 2020 (inception) through December 31, 2020:

	Period from January 3, 2020 (Inception) through December 31, 2020 (in thousands)
Operating expenses:	
Research and development (includes related party amounts of $1,025)	$ 4,633
General and administrative (includes related party amounts of $8,295)	9,767
Total operating expenses	14,400
Loss from operations	(14,400)
Net loss and comprehensive loss	$ (14,400)

Research and Development Expenses

The following table summarizes our research and development expenses for the period from January 3, 2020 (inception) through December 31, 2020:

	Period from January 3, 2020 (Inception) through December 31, 2020 (in thousands)
Direct costs:	
LP352	$ 1,266
Preclinical programs	2,452
Indirect costs:	
Personnel-related	720
Lorcaserin royalty related expense	121
All other	74
Total research and development expenses	$ 4,633

Research and development expenses were $4.6 million for the period from January 3, 2020 (inception) through December 31, 2020. These expenses include $2.5 million in preclinical expenses related to advancing LP143 and LP659, $1.3 million in clinical trial expenses related to LP352, $0.7 million in personnel-related expenses and $0.1 related to the expense for the Royalty Purchase Agreement.

General and Administrative Expenses

General and administrative expenses were $9.8 million for the period from January 3, 2020 (inception) through December 31, 2020. These expenses include $7.4 million related to stock-based compensation expense for the one-time expense related to the acceleration of vesting and the extension of the exercise period for Mr. Lind's equity awards outstanding at Arena, $1.6 million of personnel-related costs and $0.8 million of professional services and legal related fees.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred net losses and negative cash flows from operations since our inception and we expect to continue to incur significant and increasing net losses for the foreseeable future. We have principally financed our operations to date through capital contributions from Arena and a private placement of our Series A preferred stock in October 2020. As of December 31, 2020, we had cash of $55.3 million. We do not have any products approved for sale, we have not generated any revenue from the sale of products, and our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and eventual commercialization of one or more of our current or future product candidates.

Future Funding Requirements

Based on our current operating plan, we estimate that our existing cash and cash equivalents, together with the anticipated net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditure requirements through at least the next 24 months. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect. Additionally, the process of testing product candidates in clinical trials is costly, and the timing of progress and expenses in these trials is uncertain.

Our future capital requirements will depend on many factors, including:

- the type, number, scope, progress, expansions, results, costs and timing of, our preclinical studies and clinical trials for our current and any future product candidates and the potential indications which we are pursuing or may choose to pursue in the future;
- the outcome, timing and costs of regulatory review of our product candidates;
- the costs and timing of manufacturing for our product candidates, including commercial manufacturing;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our preclinical and clinical activities increase;
- the timing and amount of the payments we must make under the Arena License Agreement;
- the costs and timing of establishing or securing sales and marketing and distribution capabilities, whether alone or with third parties, to commercialize product candidates for which we may obtain regulatory approval, if any;

- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third- party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements;
- the costs of obtaining, expanding, maintaining and enforcing our patent and other intellectual property rights;
- costs associated with any product candidates, products or technologies that we may in-license or acquire; and
- if we experience any delays or encounter any issues with any of the above, including the risk of each of which may be exacerbated by the ongoing COVID-19 pandemic.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval for any product candidates or generate revenue from the sale of any product candidate for which we may obtain marketing approval. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for at least several years, if ever. As a result, we will need substantial additional financing to support our continuing operations and further the development of and commercialize our product candidates.

Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through public or private equity or debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed 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. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through collaborations, or other similar arrangements with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams or research programs or may have to grant licenses on terms that may not be favorable to us and/or may reduce the value of our common stock. 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 our product candidates even if we would otherwise prefer to develop and market such product candidates ourselves.

Cash Flows

The following table sets forth a summary of our cash flows for the period from January 3, 2020 (inception) through December 31, 2020:

	Period from January 3, 2020 (Inception) through December 31, 2020
	(in thousands)
Cash used in operating activities	$ (3,442)
Cash provided by financing activities	58,758
Net increase in cash	$ 55,316

Operating Activities

Net cash used in operating activities was $3.4 million for the period from January 3, 2020 (inception) through December 31, 2020 and was primarily due to our net loss of $14.4 million, adjusted for stock-based compensation expense of $8.5 million and a $2.5 million change in our operating assets and liabilities.

Financing Activities

Net cash provided by financing activities was $58.8 million for the period from January 3, 2020 (inception) through December 31, 2020 and was comprised primarily of net proceeds of $55.8 million from the sale and issuance of 5,600,000 shares of our Series A preferred stock in October 2020, and $3.2 million in capital contributions from Arena.

Contractual Obligations and Commitments

We lease certain office space in San Diego, California under a month to month lease with base monthly rent payment of approximately $1,000. We have not yet determined whether we will stay in the lease, enter into a lease for other office space, or take an alternative approach to our office space needs in the future.

Pursuant to the Arena License Agreement, we are obligated to make certain royalty payments. These payment obligations are contingent upon future events, such as our generating product sales. We are currently unable to estimate the timing or likelihood of generating future product sales. See the subsection entitled “—Agreements with Arena—License Agreement” above.

In addition, we enter into contracts in the normal course of business with CROs, clinical supply manufacturers and with vendors for preclinical studies and other services and products for operating purposes. These contracts do not contain any minimum purchase commitments and generally provide for termination after a notice period, and, therefore, are not considered long-term contractual obligations. Payments due upon cancellation consist only of payments for services provided and expenses incurred up to the date of cancellation.

Off-Balance Sheet Arrangements

During the period presented we did not have, nor do we currently have, any off-balance sheet arrangements as defined under the rules and regulations of the SEC.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of our financial statements and related disclosures requires us to make estimates

and judgments that affect the reported amounts of assets, liabilities, costs and expenses, and the disclosure of contingent assets and 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 a periodic basis. Our actual results may differ from these estimates.

While our significant accounting policies are described in more detail in the notes to our financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies are critical to understanding our historical and future performance, as the policies relate to the more significant areas involving management's judgments and estimates used in the preparation of our financial statements.

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 as of each balance sheet date. This process involves reviewing open contracts and purchase orders, 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 service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, based on a pre-determined schedule or when contractual milestones are met, but some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the financial statements based on facts and circumstances known to us at that time. If timelines or contracts are modified based upon changes in the protocol or scope of work to be performed, we modify our estimates and accruals accordingly on a prospective basis.

We base our expenses related to external research and development services on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. 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 vendors will exceed the level of services provided and result in a prepayment of the 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 the estimate, we adjust the accrual or the amount of prepaid expenses accordingly.

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 reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

On October 27, 2020, our board of directors and stockholder approved the 2020 Plan. Under the 2020 Plan, stock-based awards are measured at fair value and recognized over the requisite service period. Forfeitures are accounted for in the period they occur. We estimate the fair value of each stock-based award on the date of grant using the Black-Scholes option pricing model which requires the input of subjective assumptions:

- *Fair value of common stock.* See the subsection entitled "—Determination of Fair Value of Common Stock" below.
- *Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities similar to the expected term of the awards.

- *Expected dividend yield*. We base the expected dividend yield assumption on the fact that we have never paid cash dividends and have no present intention to pay cash dividends and, therefore, used an expected dividend yield of zero.
- *Expected volatility*. Since we are not yet a public company and do not have a trading history for our common stock, the expected volatility assumption is based on volatilities of a peer group of similar companies whose share prices are publicly available. The peer group was developed based on companies in the biotechnology industry. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- *Expected life*. The expected life represents the period of time that options are expected to be outstanding. Because we do not have historical exercise behavior, we determine the expected life assumption using the simplified method, for employees, which is an average of the contractual term of the option and its vesting period. The expected term for nonemployee options is equal to the contractual term.

From January 3, 2020 through October 26, 2020, employees participated in Arena's 2017 Amended and Restated Long Term Incentive Plan (Arena 2017 LTIP) and therefore we used Arena's Black-Scholes fair value, and underlying inputs and assumptions, to recognize stock-based compensation. Stock-based awards were measured at fair value and recognized over the requisite service period. There were no forfeitures.

Determination of Fair Value of Common Stock

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. Historically, these independent third-party valuations of our equity instruments were performed contemporaneously with identified value inflection points. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (Practice Aid). The Practice Aid identifies various available methods for allocating the enterprise value across classes of series of capital stock in determining the fair value of our common stock at each valuation date.

For our valuation performed prior to November 2020, in accordance with the Practice Aid, we determined the Option Pricing Method (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. This valuation was based on the OPM Backsolve methodology. 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.

For our valuations performed after November 2020, in accordance with the Practice Aid, we determined the hybrid method of the OPM and Probability-Weighed Expected Return Method (PWERM) was the most appropriate method for determining the fair value of our common stock based on our stage of development and

other relevant factors. Under the PWERM methodology, the fair value of the common stock is estimated based upon an analysis of future values for the company, 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 to arrive at an indication of the value for common stock. The hybrid method is a PWERM, where the equity value in one or more scenarios is calculated using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, 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.

In addition to considering the results of these independent third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- our stage of development and material risks related to our business;
- the progress of our research and development programs, including the status and results of preclinical studies and clinical trials for our product candidates;
- our business conditions and projections;
- our financial position and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the prices of our preferred stock sold to or exchanged between outside investors in arm’s length transactions and the rights, preferences, and privileges of our preferred stock as compared to those of our common stock, including liquidation preferences of our preferred stock;
- the analysis of initial public offerings and the market performance of similar companies in the biopharmaceutical industry;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company in light of prevailing market conditions;
- the hiring of key personnel and the experience of management;
- trends and developments in the biopharmaceutical industry; and
- external market conditions affecting the biopharmaceutical industry and trends within the biopharmaceutical industry.

Following the closing of this offering, our board of directors will determine the fair market value of our common stock based on its closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

As of December 31, 2020, the unrecognized stock-based compensation expense related to employee stock options was $2.9 million and is expected to be recognized as expense over a weighted-average period of approximately 3.4 years. The intrinsic value of all outstanding stock options as of December 31, 2020 was approximately $10.1 million, based on the estimated public offering price of $15.00 per share, of which approximately $4.1 million related to exercisable options and approximately $6.0 million related to unexercisable options.

Recently Issued Accounting Pronouncements

See Note 2 to our financial statements included elsewhere in this prospectus for recently issued accounting pronouncements.

Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

As of December 31, 2020, our cash consists of cash in readily available checking accounts. We do not hold any short-term investments. As a result, the fair value of our portfolio is relatively insensitive to interest rate changes. As of December 31, 2020, we had no debt outstanding and are therefore not exposed to interest rate risk with respect to debt. We believe a hypothetical 100 basis point increase or decrease in interest rates during the period presented would not have had a material impact on our financial results.

Foreign Currency Risk

All of our employees and our operations are currently located in the United States and our expenses are generally denominated in U.S. dollars. However, we have entered into a limited number of contracts with vendors for research and development services that are denominated in foreign currencies. We are subject to foreign currency transaction gains or losses on our contracts denominated in foreign currencies. To date, foreign currency transaction gains and losses have not been material to our financial statements, and we have not had a formal hedging program with respect to foreign currency. We believe a hypothetical 100 basis point increase or decrease in exchange rates during the period presented would not have had a material impact 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 and changing prices had a significant impact on our results of operations for the period presented herein.

Emerging Growth Company and Smaller Reporting Company Status

We are an “emerging growth company” under the JOBS Act, and as such, we 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 from new or revised accounting standards, and therefore we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

We 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 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 not included all of the executive compensation related information that would be required if we were not an emerging growth company, and we may elect to take advantage of other reduced reporting requirements in future filings.

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

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company focused on developing novel, transformative medicines for neurological diseases. We were formed in January 2020 by Arena Pharmaceuticals, Inc. (Arena) to advance a portfolio of centrally acting product candidates designed to be highly selective for specific G protein-coupled receptors (GPCRs). Our small molecule product candidates were discovered out of the same platform at Arena that represents a culmination of more than 20 years of GPCR research. Our pipeline includes:

- LP352, an oral, centrally acting, 5-hydroxytryptamine 2c receptor subtype (5-HT2c) superagonist, that we are advancing in a multiple-ascending dose (MAD) portion of a Phase 1 clinical trial and expect to initiate a Phase 1b/2a clinical trial for the treatment of developmental and epileptic encephalopathies (DEEs), including Dravet syndrome and Lennox-Gastaut syndrome, among others, in the first quarter of 2022;
- LP143, a centrally acting, full cannabinoid type 2 receptor (CB2) agonist in investigational new drug application (IND)-enabling studies for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including amyotrophic lateral sclerosis (ALS); and
- LP659, a centrally acting, sphingosine-1-phosphate (S1P) receptor subtypes 1 and 5 (S1P1,5) modulator in IND-enabling studies for central nervous system (CNS) neuroinflammatory diseases.

We also have additional earlier discovery stage compounds.

LP352, our most advanced product candidate, is an oral, centrally acting, 5-HT2c superagonist with negligible observed impact on 5-HT2b and 5-HT2a receptor subtypes in our preclinical studies to date. 5-HT2b and 5-HT2a receptor agonism have been associated with significant adverse side effects, including valvular heart disease and pulmonary arterial hypertension in the case of the 5-HT2b receptor, and hallucinations and mild to severe anxiety in the case of the 5-H2Ta receptor. LP352 has the potential to be a clinically differentiated 5-HT2c superagonist for patients with DEEs, a group of severe early-childhood onset epilepsies characterized by refractory seizures and developmental delay or regression. Certain compounds in the 5-HT2c agonist class have been shown to produce clinical benefit in epilepsy patients, although the side effect profiles of available non-selective 5-HT2 therapies may limit their use due to their activity on receptor subtypes 5-HT2b and 5-HT2a. Fenfluramine, marketed as FINTEPLA, a non-specific 5-HT2 agonist, was recently approved for the treatment of seizures associated with Dravet syndrome by the U.S. Food and Drug Administration (FDA). Fenfluramine has been associated with significant side effects and FINTEPLA has a Risk Evaluation and Mitigation Strategy (REMS) program requirement and a boxed warning. Another 5-HT2c agonist, lorcaserin, is also under evaluation for its potential to reduce seizures in patients with Dravet syndrome and refractory epilepsies. Lorcaserin was discovered by Arena and approved by the FDA for chronic weight management, marketed as BELVIQ by Eisai Inc. and Eisai Co. Ltd. (collectively, Eisai), and withdrawn from the market at the request of the FDA based on a change in the FDA's risk-benefit assessment for the approved indication. However, the FDA authorized an expanded access program for patients with Dravet syndrome and other refractory epilepsies to continue to receive lorcaserin. An expanded access program allows patients with an immediately life-threatening condition or serious disease or condition to gain access to an investigational medical product for treatment outside of clinical trials when no comparable or satisfactory alternative therapy options are available. LP352 was designed and developed by Arena to be the next generation to lorcaserin, with the goal of being a safer and more effective 5-HT2c agonist. We believe LP352's potential for high selectivity and novel chemistry may reduce seizures in DEE patients and overcome the known or perceived safety limitations of available drugs in the 5-HT2 class. In the completed single-ascending dose (SAD) portion of the Phase 1 clinical trial, there were no unexpected adverse events (AEs) observed and no cases of serious adverse events (SAEs) reported.

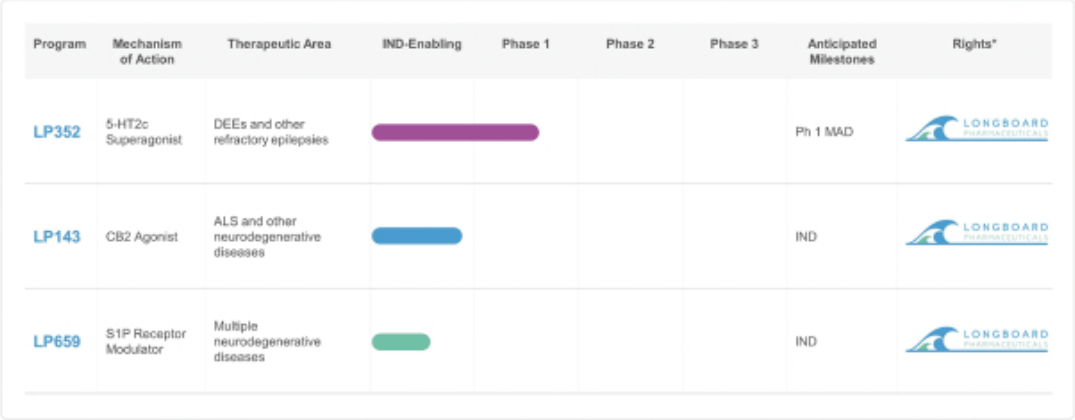
We are also developing LP143, a CB2 agonist that showed 1,000 times greater selectivity for CB2 than CB1 in preclinical studies, and LP659, a S1P1,5 receptor agonist. Based on their novel chemistry, potential for high selectivity for specific subtypes of GPCRs and favorable blood-brain-barrier penetration, we believe these compounds have the potential to address microglial neuroinflammation, which may drive disease progression in

a range of neurodegenerative diseases. LP143 and LP659 were designed by Arena to have more optimized pharmacology and pharmacokinetics (PK) for their intended GPCR targets, including GPCR subtypes, compared to other known compounds. We believe this potential selectivity and specificity could result in superior profiles in the clinic compared to drugs that may not fully engage the intended GPCR target, may cause off-target activity, or may be associated with other undesirable effects. LP143 is a centrally acting, full CB2 agonist being developed for the treatment of neurodegenerative diseases associated with neuroinflammation caused by microglial activation, including ALS. CB2 agonism has been shown in studies to regulate neuroinflammatory processes, including microglial activation, reducing the amount of damage characteristic of degeneration. LP659 is a centrally acting, S1P1,5 receptor modulator for which aberrant modulation has been shown to be involved in a wide range of neurodegenerative diseases.

Our Pipeline

Our product candidates are targeted towards specific GPCRs. GPCRs mediate cell-to-cell communication in humans, and approximately 35% of prescription drugs currently on the market target GPCRs, making GPCRs a highly validated class of drug targets. Our GPCR product candidates are designed to increase the likelihood of the desired pharmacology and PK and minimize the risk of off-target effects.

The following table provides an overview of our current programs:



* We hold worldwide rights to our product candidates in our therapeutic areas of focus for such compounds through the Arena License Agreement, which is defined and described below.

LP352

We are developing LP352, an oral, centrally acting, 5-HT2c superagonist for DEEs and other epileptic disorders. DEEs are a group of severe early-childhood onset epilepsies characterized by refractory seizures and developmental delay or regression. These diseases are often progressive and resistant to treatment. DEEs encompass a diverse range of etiologies and includes Dravet syndrome and Lennox-Gastaut syndrome, among others. Based on a 2015 U.S. incidence rate for Dravet syndrome and a 2007 incidence rate for Lennox-Gastaut syndrome, there are an estimated 21,000 patients with Dravet syndrome and 47,000 patients with Lennox-Gastaut syndrome in the United States. Based on a 2021 European Union (EU) incidence rate, there are an estimated 21,000 patients with Dravet syndrome in the EU. The number of patients with Lennox-Gastaut syndrome in the EU is less known. LP352 selectively targets the 5-HT2c receptor, which has been shown to upregulate the release of gamma-aminobutyric acid (GABA), a principal neurotransmitter in the brain. This release of GABA increases the threshold for neuronal hyperexcitability, and decreases the likelihood of seizure occurrences. We believe LP352 has the mechanistic potential to reduce the frequency of seizures in Dravet syndrome and Lennox-Gastaut syndrome, as well as a broader epilepsy population.

We are investigating LP352 in a Phase 1 clinical trial for which the SAD portion has been completed. Initial PK data from the SAD portion of the clinical trial demonstrated dose dependent PK properties with proportional increases in area under the curve (AUC) and maximum serum concentrations (Cmax). No unexpected AEs were observed and no SAEs were reported. We initiated the MAD portion of this clinical trial in February 2021, and expect to report topline data for this portion in the second half of this year. We plan to initiate a Phase 1b/2a clinical trial in the first quarter of 2022, pending authorization to proceed under an IND we intend to submit to the FDA's Division of Neurology.

LP143

We are developing LP143, a centrally acting, full CB2 agonist for neurodegenerative diseases associated with neuroinflammation caused by microglial activation. CB2 agonism has been shown in preclinical studies to regulate neuroinflammatory processes, reducing the neuronal damage characteristic of degeneration. We believe there is a strong rationale for CB2 agonism in neurodegenerative diseases, given increased CB2 expression in patients with these diseases as well as results from animal models. We see potential for a selective CB2 agonist to treat a range of neurodegenerative diseases. LP143, through its selectivity for CB2 versus the cannabinoid type 1 receptor (CB1), was designed to minimize the risk of psychoactive AEs associated with CB1 activation. Our initial focus is on ALS. Most ALS patients experience rapid disease progression and poor prognosis, with paralysis and death seen within a span of two to five years. Preclinical data have demonstrated the benefit of CB2 agonism in a mouse model of ALS, with treated mice demonstrating delays in loss of motor function and improved survival. In preclinical studies, LP143 has demonstrated 1,000-fold greater selectivity for CB2 over CB1, sustained activity over the duration of treatment, and favorable blood-brain-barrier penetration. LP143 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the first quarter of 2022.

LP659

We are developing LP659, a centrally acting, S1P1,5 receptor modulator for neurodegenerative diseases. LP659 was designed for optimized pharmacology, PK and engagement of S1P1,5, which may lead to improved efficacy and safety. LP659 was designed to avoid the negative effects connected to the receptor subtypes 2 and 3, which may be associated with more serious, off-target cardiac, pulmonary, and cancer-related effects. Aberrant S1P receptor modulation has been shown to be involved in a wide range of neurodegenerative diseases, including multiple sclerosis, lupus, Parkinson's disease and Alzheimer's disease. Preclinical data demonstrated an initial dose-dependent decrease in disease progression over 17 days in a mouse model of demyelinating disease. LP659 rapidly reduced circulating lymphocytes, which returned to baseline after its clearance. We believe LP659 has high oral bioavailability with a direct impact on CNS glial cell S1P receptors. LP659 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the second half of 2022.

Our Company History and Team

We were established in January 2020 as Arena Neuroscience, Inc., a wholly owned subsidiary of Arena, based in San Diego, California. We changed our name to Longboard Pharmaceuticals, Inc. and launched as an independent company in October 2020. Building on Arena's 20-year history in discovering, developing and optimizing GPCR therapies, we believe we are well positioned to execute our clinical development programs. We are initially focused on developing LP352, LP143 and LP659, which Arena designed to have distinct chemistry and therapeutic profiles from Arena's other product candidates with similar mechanisms of actions.

Arena developed lorcaserin as a therapeutic for weight management. LP352 was designed to be more specific and selective for the 5-HT2c subtype than lorcaserin. LP352 was initially licensed to Outpost Medicine, LLC and OPM2 Limited (collectively, Outpost) by Arena for development in stress urinary incontinence, however, the rights were returned to Arena after Outpost made a strategic decision that this was no longer an attractive disease area opportunity.

Arena focused on discovering compounds to target the CB2 and S1P receptors. Olorinab (another compound being developed by Arena) was designed to be an oral peripherally active, agonist of CB2, which is in a Phase 2b clinical study for abdominal pain in irritable bowel syndrome, while LP143 was designed to be a centrally acting agonist of CB2. Similarly, LP659 was designed to be a centrally acting S1P1,5 receptor modulator with greater brain penetration than other compounds developed by Arena with a similar mechanism of action.

In October 2020, we entered into a License Agreement (Arena License Agreement) with Arena, under which we have exclusive rights to develop our product candidates for neurological disease indications. In addition to LP352, LP143 and LP659, we plan to continue to identify and develop other clinically differentiated product candidates for neurological diseases with high unmet medical need.

In addition, in October 2020, we purchased the right to receive all milestone payments, royalties, interest and other payments relating to net sales of lorcaserin owed or otherwise payable by Eisai, pursuant to a Royalty Purchase Agreement with Arena and 356 Royalty Inc., a wholly owned subsidiary of Arena. Lorcaserin is currently in a Phase 3 clinical trial for Dravet syndrome.

We have assembled an executive team that is highly experienced in small-molecule drug discovery and clinical development. Kevin R. Lind, our President and Chief Executive Officer, previously served as Executive Vice President and Chief Financial Officer at Arena. Mr. Lind joined Arena in 2016 as part of a new management team focused on redeploying Arena's resources to develop its novel clinical programs. Philip Perera, M.D., our Chief Medical Officer, previously served as the Chief Medical Officer of Jazz Pharmaceuticals, Inc., consulting Chief Medical Officer and Clinical Lead for Abcentra LLC and as a senior medical consultant to Sage Therapeutics, Inc. and ConSynance Therapeutics. Brandi Roberts joined as our Chief Financial Officer in January 2021. Ms. Roberts previously served as the Chief Financial Officer of Lineage Cell Therapeutics, Inc. REVA Medical, Inc. and Mast Therapeutics, Inc.

In October 2020, we completed a $56.0 million private placement of our Series A convertible preferred stock (Series A preferred stock), with participation by Arena, Cormorant Asset Management, Farallon Capital Management, HBM Healthcare Investments, Highside Capital Management and T. Rowe Price Associates.

Our Strategy

Our goal is to develop therapies targeting well-characterized receptor pathways with optimized pharmacology and PK properties to transform the lives of patients with neurological diseases, initially focused on rare neurological diseases. Key elements of our strategy to achieve this goal include:

- ***Advance our lead program LP352 through clinical development and approval in DEEs.*** LP352, our most advanced program, is a 5-HT2c superagonist currently in a Phase 1 clinical trial for the treatment of DEEs, including Dravet syndrome and Lennox-Gastaut syndrome. Existing treatment options for these rare neurological diseases have significant limitations, and, if approved, we believe LP352 would represent a therapeutic advancement for patients. The SAD portion of the Phase 1 clinical trial has been completed and we initiated the MAD portion of this clinical trial in February 2021. In addition, we expect data from the MAD portion in the second half of this year and intend to initiate a Phase 1b/2a clinical trial of LP352 in DEEs in the first quarter of 2022.
- ***Progress LP143 into clinical development for neurodegenerative diseases associated with neuroinflammation caused by microglial activation.*** LP143 is a CB2 agonist currently in IND-enabling studies for neurodegenerative diseases associated with neuroinflammation caused by microglial activation, and we expect to submit an IND to the FDA in the first quarter of 2022. While we believe LP143 has therapeutic potential in a variety of diseases associated with microglial neuroinflammation, we have focused our initial efforts on ALS, a debilitating disease with high unmet medical need.
- ***Continue preclinical development of LP659 across a range of CNS diseases associated with neuroinflammation and progress into clinical development.*** LP659 is an S1P1,5 receptor modulator

currently in IND-enabling studies for CNS diseases associated with neuroinflammation and we expect to submit an IND to the FDA in the second half of 2022. We believe LP659 may have potential in several diseases associated with neuroinflammation, including multiple sclerosis.

- ***Identify additional product candidates and expand current candidates into additional neurological diseases.*** We see potential for our current product candidates to be evaluated in clinical trials outside of their initial indications and will evaluate additional indications to maximize the potential of our pipeline. Our current product focus is on targets that are well characterized in neurological diseases but for which there are limitations with currently available therapies. We also plan to continue to identify and develop additional novel product candidates that align with our focus.
- ***Explore strategic collaborations to maximize the value of our product candidates.*** We plan to explore collaborations opportunistically to maximize the value of our pipeline. We intend to retain significant economic and commercial rights to our programs in key geographic areas that are core to our long-term strategy.

Our Product Candidates

LP352, an oral, centrally acting, 5-HT2c superagonist

We are developing LP352, an oral, centrally acting, 5-HT2c superagonist for DEEs and other epileptic disorders. LP352 is designed to selectively target 5-HT2c, which has been shown to upregulate the release of GABA, a principal inhibitory neurotransmitter in the brain. This release of GABA increases the threshold for neuronal hyperexcitability and decreases the likelihood of seizure occurrence. We believe LP352 has the mechanistic potential to reduce the frequency of seizures in Dravet syndrome and Lennox-Gastaut syndrome as well as a broader epilepsy population. We initiated the MAD portion of this clinical trial in February 2021, and expect to have data for this portion in the second half of this year. We plan to initiate a Phase 1b/2a clinical trial in the first quarter of 2022, pending authorization to proceed under an IND we intend to submit to the FDA's Division of Neurology.

Background on Epilepsy

Epilepsy covers a broad range of disorders and is characterized by spontaneous and recurrent seizures, or bursts of neuronal hyperactivity. Seizures are caused by a disrupted balance between excitatory and inhibitory signaling at the synaptic level. Excitatory synaptic activity is normally regulated by inhibitory interneurons, but disruptions to this regulatory process can result in hyperexcitability. Common aberrations include mutations to ion channels or neurotransmitter genes or proteins that regulate signaling, such as GABA, and disruptions lead to the signaling aberrations characteristic of epileptic disorders. For example, Dravet syndrome is characterized by mutations in the sodium ion channel, the ion channel critical for the generation and propagation of action potentials in neurons, and which ordinarily plays a crucial role inhibitory signaling.

Overview of the Forms of Epilepsy

Epilepsy spans all age groups and in many cases is debilitating, with a large portion of patients resistant to pharmacologic treatment, underscoring a large unmet need. Epilepsy is currently estimated to affect up to 1.2% percent of the U.S. population or approximately 3.4 million individuals, with roughly 150,000 new cases diagnosed each year. We are initially focused on DEEs, which are a group of severe early childhood-onset epilepsies characterized by refractory seizures and developmental delay or regression and include Dravet syndrome and Lennox-Gastaut syndrome, among others, but the 5-HT2c pathway has been implicated in a broader set of epilepsies.

Dravet Syndrome—Dravet syndrome is an early childhood-onset CNS disease that results in severe epileptic seizures typically occurring within the first year after birth. Incidence for Dravet syndrome is approximately

1:15,000 in the United States, and 90% of the associated mutations are de novo (not passed from a parent). Mortality rate for Dravet syndrome patients is higher than general epilepsy patients, with a rate of 15-20% by adulthood. The disease is genetically linked, with 70% to 85% of cases characterized by mutations in the SCN1A gene. Mutations cause defects in the function of the sodium ion channel. Seizures due to Dravet syndrome are typically difficult to control and require life-long treatment.

Lennox Gastaut Syndrome—Lennox-Gastaut syndrome is a severe form of childhood-onset epilepsy with prevalence of approximately 1:7,000 in the United States. The age of onset is typically between three and five years and affected children typically experience cognitive dysfunction, leading to developmental and behavioral problems. Lennox-Gastaut syndrome is characterized by multiple seizure types, with the most common associated seizures being tonic and atonic seizures. Seizures due to Lennox-Gastaut syndrome are difficult to control and generally require life-long treatment. The pathophysiology of Lennox-Gastaut syndrome is less well-known than that of Dravet syndrome.

Some of the epileptic indications where the 5-HT2c pathway has been implicated are shown in the table below:

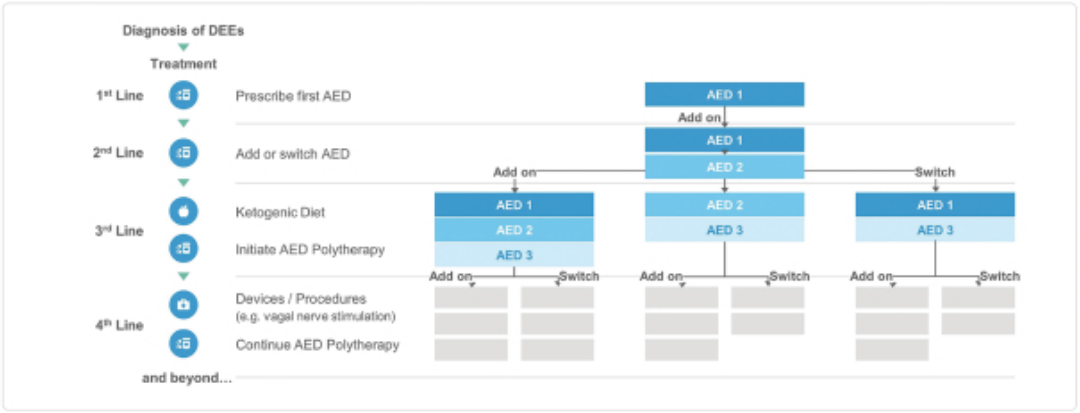
	Dravet Syndrome (DS)	Lennox-Gastaut Syndrome (LGS)	Doose Syndrome (myoclonic astatic epilepsy)	Childhood Absence Epilepsy	Refractory Generalized Clonic-Tonic
Prevalence	21k pts in US (1:15,000)	47k pts in US (1:7,000)	7k pts in US* (1:10,000 children)	47k pts in US* (1:1,553 children)	225k pts in US (1:1,466)
Age of onset	Birth – 1 year	3 – 5 years	18 mon – 6 years	4 – 7 years	5 - 40 years
Clinical Characteristics	• frequent episodes of prolonged seizures • increased risk of Sudden Unexplained Death in Epilepsy (SUDEP)	• developmental epileptic encephalopathy • multiple seizure types, cognitive regression, and an abnormal EEG	• generalized epilepsy syndrome of young children characterized by multiple seizure types • children are developmentally normal before the onset of epilepsy	• daily seizures characterized by staring spells during which the child is not responsive • may result in learning disabilities and memory loss	• loss of consciousness & then a scream with stiffening of the body • evolves into clonic jerking followed by postictal sleepiness, confusion, or agitation

* Children in the US under 18 years of age

Current Treatment Paradigm

DEEs are commonly treated with multiple combinations of antiepileptic drugs (AEDs) though physician preference for administered therapies differs across different epilepsy types. Currently available AEDs have limited long-term efficacy with many patients cycling through multiple lines of treatment to try to optimize efficacy. Non-pharmaceutical therapies for epilepsy patients include a ketogenic diet, vagus nerve stimulation (VNS), and surgery for some patients.

The following table is illustrative of the typical treatment paradigm for DEEs:



Dravet syndrome and Lennox-Gastaut syndrome are two types of epilepsies that are difficult to treat given that most patients are refractory to antiseizure medications. The seizures for a vast majority of these patients remain uncontrolled and patients typically require multiple lines of treatment. In 2018, GW Pharmaceuticals' Epidiolex (cannabidiol) was approved by the FDA for Dravet syndrome and Lennox-Gastaut syndrome. Zogenix's FINTEPLA (fenfluramine) was approved for the treatment of seizures associated with Dravet syndrome in patients two years of age and older in June 2020 and is available through a REMS program. The REMS program restricts prescriptions to prescribers who are enrolled in the FINTEPLA REMS program. Patients must also enroll in the REMS program and comply with ongoing monitoring requirements.

Background on GABA and Neurotransmission

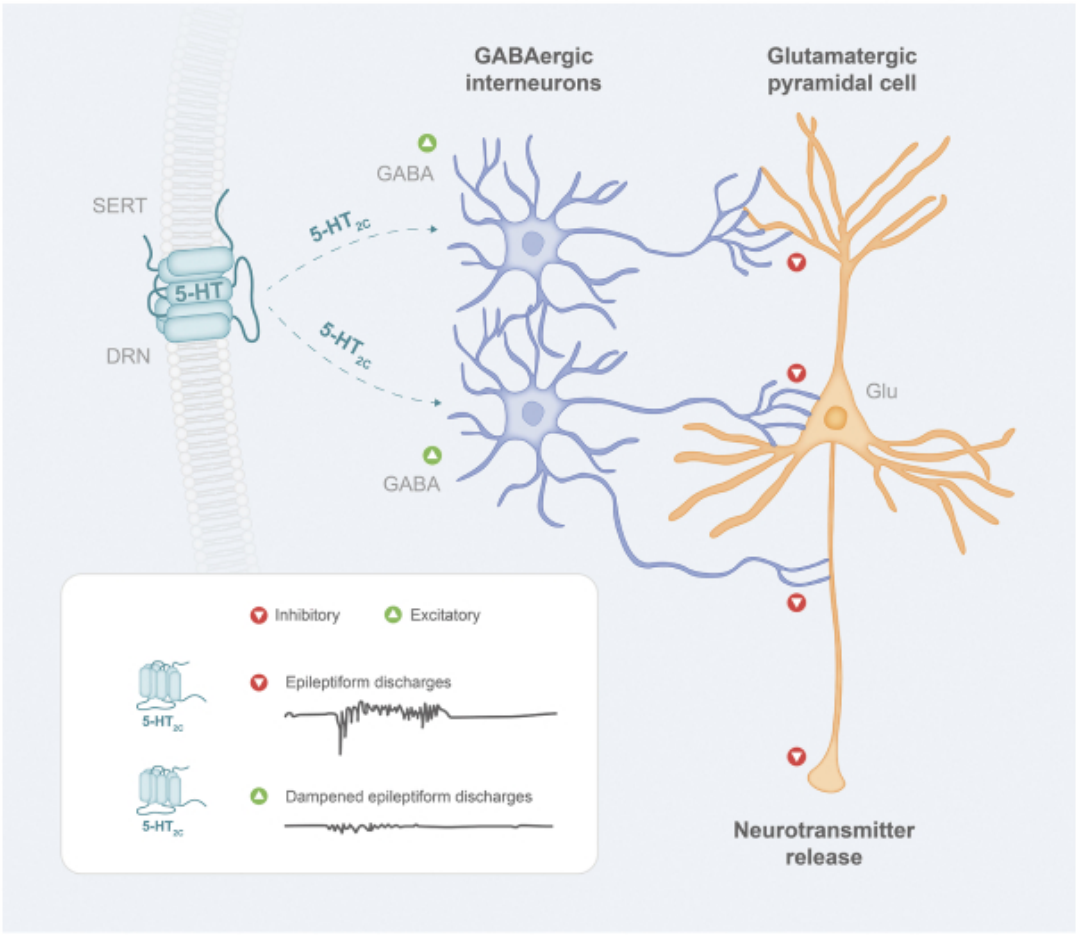
GABA is a principal neurotransmitter in the brain and binds to receptors inside and outside the synaptic gap. GABA plays key roles in neuronal inhibition, and reduction of GABA levels has been shown to result in a decline of this inhibition. Lack of GABA-mediated inhibition subsequently leads to the chronic activation of post-synaptic neurons characteristic of seizures.

5-HT2 Receptors

5-HT receptors, or serotonin receptors, are widely expressed in neural networks. Serotonin plays a key role in modulating neurotransmission, as agents elevating extracellular serotonin levels have been shown to inhibit focal and generalized seizures while agents reducing serotonin levels have been shown to lower the threshold for seizures. To date, 14 receptor subtypes of 5-HT receptors have been characterized and are grouped into seven classes. The two main classes are 5-HT1 and 5-HT2. 5-HT2 receptors are G-coupled membrane proteins that are distinguished by their function of increasing intracellular calcium levels (Ca2+) and activation of protein kinase C. Three subtypes exist: 5-HT2a, 5-HT2b and 5-HT2c, with the 5-HT2a and 5-HT2c receptor subtypes primarily expressed in the CNS and 5-HT2b primarily expressed in the peripheral nervous system. All subtypes have been shown to modulate neurotransmission, though the 5-HT2b receptor has been implicated with valvular heart disease and pulmonary arterial hypertension and the 5-HT2a receptor subtype has been implicated with hallucinations and mild to severe anxiety.

5-HT2c is one of the many binding sites for serotonin and is expressed on GABAergic, glutamatergic, and dopaminergic neurons. Multiple preclinical studies have suggested that 5-HT2c play an important role in the inhibition of seizures. For example, in a knockout mouse model, mice missing the 5-HT2c were shown to have a lower threshold for seizures and experienced spontaneous convulsions. Preclinical models suggest that activation of 5-HT2c regulates GABA and glutamate pathophysiology seen in seizure disorders. Excitatory glutamate release is directly and indirectly regulated by 5-HT actions on GABA interneurons and pyramidal neurons. Research proposes that neuronal hyperexcitability occurs during the transition to seizure when excitatory glutamatergic activity increases while inhibitory GABAergic synaptic input is weakened. It is thought that 5-HT2c agonists, acting on GABA interneurons, inhibit excitatory glutamatergic activity, thereby decreasing neuronal action potential firing and downstream electrical activity.

This downstream biological pathway and effect on neuronal electrical activity are illustrated in the below:



The 5-HT2 class and 5-HT2c subtype have additionally been shown in the clinic to reduce seizure frequencies.

Fenfluramine—Fenfluramine, a 5-HT2 agonist with activity on 5-HT2a, 5-HT2b and 5-HT2c receptors, was initially developed as monotherapy treatment for adult obesity as well as in combination with phentermine (fen-phen). Later, however, reports were published documenting cases of valvular heart disease and pulmonary arterial hypertension, causing the program to be pulled from the market in 1997. Zogenix, Inc. more recently began developing fenfluramine for Dravet syndrome, Lennox-Gastaut syndrome, and other rare epilepsies. In June 2020, the FDA approved fenfluramine for the treatment of seizures associated with Dravet syndrome (marketed as FINTEPLA). Approval was based on data from two randomized, double-blinded, placebo-controlled Phase 3 clinical trials, as well as safety data from an open-label extension trial in which patients received FINTEPLA for up to three years. Patients administered the therapy demonstrated significant reductions in monthly convulsive seizure frequency compared to placebo. However, the FDA placed a black box warning in FINTEPLA's label noting an association between serotonergic drugs with 5-HT2b agonist activity, including fenfluramine, and valvular heart disease and pulmonary arterial hypertension. FINTEPLA is available only through a restricted distribution program called the FINTEPLA REMS program, in which prescribers and patients must be enrolled. Cardiac monitoring via echocardiogram is required pretreatment, during treatment and after treatment with FINTEPLA.

Lorcaserin—Lorcaserin, a 5-HT2c agonist, was discovered by Arena and approved by the FDA for weight management, marketed as BELVIQ by Eisai. Lorcaserin was withdrawn from the market at the request of the FDA following the FDA's analysis of the CAMELLIA-TIMI 61 clinical trial, for which patients in the lorcaserin group demonstrated a numerically higher but not a statistically significantly higher rate of total cancer diagnoses (7.7% vs 7.1% placebo). Based on the results of this clinical trial, the FDA concluded that the risks of lorcaserin outweigh the benefits, and requested that lorcaserin be withdrawn from the market for the approved indication of weight management. The FDA authorized an expanded access program for patients with Dravet syndrome to continue to receive lorcaserin.

Lorcaserin has demonstrated the potential to reduce seizures in patients with Dravet syndrome and refractory epilepsies. A National Institutes of Health funded study conducted at the University of California, San Francisco showed that several 5-HT receptor modulating compounds, including lorcaserin, reduced seizure-like activity in a zebrafish model of Dravet syndrome.

Lorcaserin has been tested in a small study of "off-label" use in five children who each had an SCN1A gene mutation or a clinical diagnosis of Dravet syndrome, and failed at least two medications. Lorcaserin was initially dosed at 2.5 mg at bedtime and gradually increased weekly as needed to a maximum dose of 10 mg twice a day or 0.3 mg/kg/day, whichever occurred first. One patient was initially seizure-free for three weeks, one patient was seizure-free for two weeks, and a third patient had one to two seizure-free days per week. All five patients exhibited a reduction in the total number of seizures after three months on treatment.

A follow-up retrospective study conducted in 35 lorcaserin-treated refractory epilepsy patients found a 50% reduction in mean monthly frequency of seizures in Lennox-Gastaut syndrome patients (n = 9), a 43% reduction in patients with Dravet syndrome (n = 20), and a 23% reduction in patients with other epilepsies (n = 6). Overall, the study demonstrated a 47.7% median percentage reduction in mean monthly frequency of motor seizures from baseline.

In October 2020, following consultation with the FDA, Eisai Inc. initiated a Phase 3 clinical trial of lorcaserin in patients with Dravet syndrome.

Our Solution

LP352 in Epilepsies

LP352 is an oral, centrally acting, 5-HT2c superagonist. A superagonist displays higher receptor signaling output than the natural agonist. As a 5-HT2c superagonist, LP352 is designed to modulate GABA inhibition and as a result, suppress the hyperexcitability that is characteristic of seizures. Based on its potential mechanism of action, we believe that LP352 has the potential to reduce the frequency of seizures in Dravet syndrome, Lennox-Gastaut syndrome, and across a broad range of epilepsies. 5-HT2c agonism has shown clinical benefit in epilepsy patients, however, currently available 5-HT2 agonists have been associated with significant adverse side effects. LP352 was discovered at Arena, and was developed to be the next-generation to lorcaserin. LP352 has novel chemistry and attributes, and was designed with the goal of being a safer, more effective 5-HT2c superagonist. We hold worldwide rights to LP352 through the Arena License Agreement.

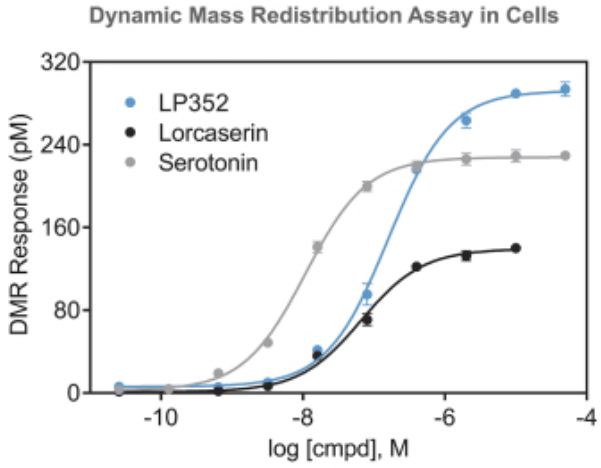
LP352 has demonstrated in *in vitro* preclinical studies selectivity on the 5-HT2c receptor subtype over the 5-HT2b and 5-HT2a receptor subtypes, as shown in the following table:

	Serotonin Receptor Subtype	EC_{50}, nM	Ki, nM	Selectivity 2c vs 2b	Selectivity 2c vs 2a
LP352 5-HT2c Superagonist	5-HT2c	~120	~50	>200x	>200x
	5-HT2b	>10,000	>10,000		
	5-HT2a	>10,000	>10,000		
Nordexfenfluramine[1] (an active metabolite of fenfluramine)	5-HT2c	72.4	10.4	0.94x	11.5x
	5-HT2b	25.7	9.8		
	5-HT2a	1778	120.2		
Lorcaserin[2]	5-HT2c	39	13	11.3x	7.1x
	5-HT2b	2380	147		
	5-HT2a	553	92		

(1) Third party study previously commissioned by Arena
(2) BELVIQ FDA approved prescribing information 06/2012

The above table is for illustrative purposes only and is not a head-to-head comparison. These data were generated from different studies, and caution should be exercised when comparing data across studies. However, each of these studies followed the same basic protocol using HEK293 cells expressing recombinant human 5-HT2 receptors, and receptor densities in all of the functional assays were determined by [^{125}I]-2,5-Dimethoxy-4-iodoamphetamine (DOI) radioligand binding.

A superagonist is a compound that is capable of producing a higher receptor response than the endogenous agonist. We have shown LP352 to be a superagonist in a dynamic mass redistribution assay measuring a holistic integrated cellular response to lorcaserin, serotonin and LP352. This assay demonstrated that, as the concentration of LP352 increases, the cellular response is greater than the endogenous ligand serotonin and considerably more than lorcaserin. The results of this assay are demonstrated below.



LP352 added to cells and the resulting holistic integrated cellular response

LP352 Clinical Development Overview

LP352 is being evaluated in a Phase 1 clinical trial in healthy volunteers that consists of four parts. Parts A and C are randomized, double-blind, placebo-controlled, parallel-group, SAD and MAD designs. Part B is a randomized, double-blind, placebo-controlled, single-dose design, and includes participants from Part A to assess food effect.

Part D is a randomized, double-blind, placebo-controlled, multi-dose titration design. Safety and tolerability will be evaluated throughout the clinical trial, and blood sampling and urine collection for PK analysis will be also collected. LP352 will be administered as a capsule formulation. The Phase 1 clinical trial will enroll approximately 80 to 112 healthy participants.

Part A SAD Results—The SAD portion of the clinical trial was completed by Outpost prior to the return of LP352 to Arena. Forty participants enrolled and completed the dosing period in Part A, with results available up to 96 hours post-dose. Overall, LP352 was observed to be generally well-tolerated, and AEs were consistent with events observed with other centrally acting 5-HT2c agonists. Headache was the dose limiting AE, and mild to moderate headache was the most common treatment-emergent AE. There were no SAEs reported, and no participants dropped out due to AEs.

Part B Food Effect Results—Eight participants enrolled and completed Part B. Mean peak plasma concentrations and terminal half-life were both similar between fasted and fed dosing at 6 mg. While the attainment of Cmax was delayed by approximately 1.5 hours in the presence of food and the mean total plasma exposure (AUC) was increased by 24% when dosing an LP352 capsule under fed conditions, these results were not considered to be clinically meaningful differences in the plasma drug concentration-time profiles and PK (AUC and Cmax) of LP352 between fasting and postprandial capsule administration.

In the SAD and food effect portions of the clinical trial, LP352 demonstrated favorable PK and pharmacodynamic effects (with target plasma exposure (minimum serum concentration) measured based on prolactin levels), including dose dependent PK properties with proportional increases in AUC and Cmax.

Part C MAD—We are advancing the MAD portion of the Phase 1 clinical trial and expect to have data for this portion in the second half of 2021.

Part D Dose Titration—In Part D of this clinical trial, the safety and tolerability of titrating LP352 will be examined.

Phase 1b/2a Clinical Trial

A Phase 1b/2a safety, tolerability and exploratory efficacy clinical trial of LP352 is in the planning stage. This will be a randomized double-blind placebo-controlled trial. Adult participants with a variety of treatment resistant motor seizures and seizure disorders that fall into the category of DEEs will be enrolled. We plan to initiate a Phase 1b/2a clinical trial in the first quarter of 2022, pending authorization to proceed under an IND we intend to submit to the FDA's Division of Neurology.

LP143, a centrally acting, full CB2 agonist

We are developing LP143, a centrally acting, full CB2 agonist, for neurodegenerative diseases associated with neuroinflammation caused by microglial activation. CB2 agonism has been shown to regulate neuroinflammatory processes, reducing the neuronal damage characteristic of degeneration. We believe there is strong rationale for CB2 agonism in neurodegenerative diseases, given increased CB2 expression in patients with these diseases as well as results from animal models. LP143, through its selectivity for CB2, versus the CB1, was designed to minimize the risk of psychoactive adverse effects associated with CB1 activation. Our initial focus is in ALS and we also see potential to treat a range of other neurodegenerative diseases. LP143 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the first quarter of 2022.

ALS Background

Disease Overview—ALS is a progressive nervous system disease that leads to muscle weakness and paralysis. The disease is characterized by rapid progression of muscle wasting and weakness until death ensues

due to respiratory muscle failure. Most ALS patients experience rapid disease progression and poor prognosis, with paralysis and death seen within a span of two to five years from diagnosis. The prevalence in the United States was estimated at approximately 16,000 people as of 2015 and the prevalence in the EU is estimated at approximately 29,000 people as of 2015. The rate of incidence is estimated at 2:100,000 people, with approximately 5,000 people in the United States diagnosed each year. The primary pathology associated with ALS involves motor neuron degeneration. Most causes of ALS are unknown, with two primary suggested theories involving neuroinflammation and oxidative damage. There is a growing body of evidence that microglia, a type of non-neuronal (glial) cell located throughout the brain and spinal cord, are activated in ALS and are key to motor neuron degeneration and disease progression. It is also believed that ALS could have multifactorial etiology, with environmental factors contributing to disease pathology.

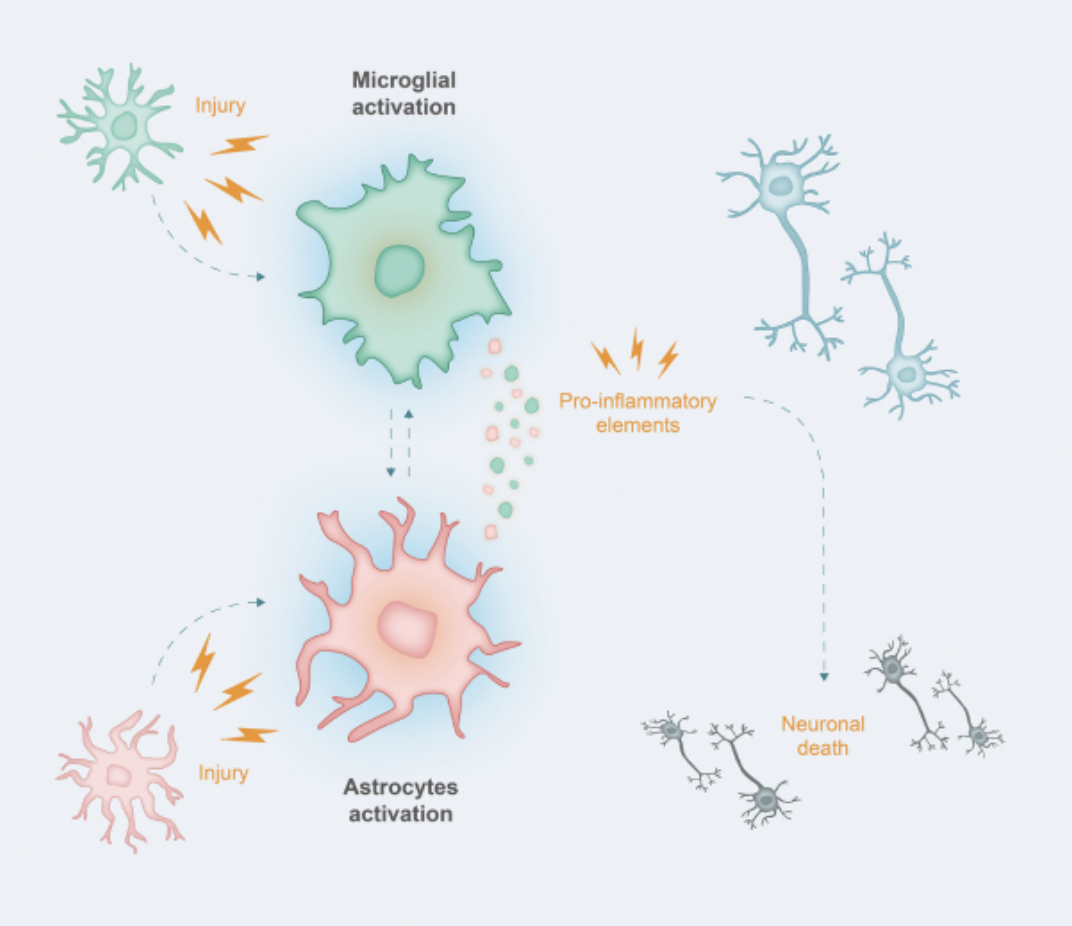
Current Treatment Paradigm—There is currently no cure for ALS. Rilutek (riluzole) and Radicava (edaravone) are the only FDA approved drugs to slow disease progression in ALS but there remains significant unmet medical need. Rilutek was approved by the FDA in 1995 as the first treatment for ALS. The approval was based on two studies demonstrating a survival benefit of two to three months. Radicava was approved by the FDA in 2017 based on the findings of a Phase 3 clinical trial conducted in Japan. Results showed patients on Radicava experienced a 33% slower decline in their ability to perform everyday activities versus patients on a placebo. Radicava did not demonstrate a significant survival benefit.

Microglial Activation and Neurodegeneration

Microglia are involved in both innate and adaptive immunity in the CNS. Their interaction with T cells is a major component of brain autoimmunity, and their pathogenic interactions with neurons play a role in neurodegeneration. Traditionally, microglial cells have been categorized into two types: M1 microglia, which are cytotoxic and release proinflammatory cytokines, and M2 microglia, which are protective and release anti-inflammatory cytokines and neutrophins. However, it has been increasingly recognized that there are a variety of microglial phenotypes in the brain with phenotypes now seen as more of a grayscale, making delineation into two categories more difficult.

Though not classified as an autoimmune disease, ALS disease pathogenesis involves neuroinflammation resulting from the presence of microglia, astrocytes (a subtype of glial cell), and T lymphocytes. As shown in the figure below, neurotoxic signaling from motor neurons stimulate cells to shift from anti-inflammatory and neuroprotective to pro-inflammatory and neurotoxic. The activated cells then produce reactive oxygen species and pro-inflammatory cytokines, leading to motor neuron stress, cell damage, and cell death.

This biological pathway is illustrated in the below:



Cannabinoid Receptors

The endocannabinoid system (ECS) regulates functions such as pain, stress, appetite, energy metabolism, cardiovascular function, reward and motivation, reproduction, and sleep. The ECS is comprised of a network of endocannabinoid receptors found throughout the CNS and peripheral nervous system.

Interest has increased in cannabinoids for their antioxidant, anti-inflammatory, and anti-excitotoxic effects in preclinical models. Studies have shown that cannabinoids inhibit the release of pro-inflammatory cytokines and chemokines, suppressing the inflammatory response. *In vivo* studies in ALS have suggested cannabinoids act as neuroprotective and anti-oxidant agents in ALS and have the potential to reduce oxidative cell damage and neuroinflammation, the two purported causes of neurodegeneration. Additionally, these studies demonstrated the ability of cannabinoids to delay disease progression and prolong survival.

CB2 Receptors

There are two main cannabinoid receptors, CB1 and CB2, both of which are GPCRs. CB1 is expressed primarily on neurons and glial cells in the brain and CB2 is expressed primarily in immune system cells and

cortical and spinal motor neurons. CB2, which normally exists in the peripheral system, is up-regulated in the inflamed neural tissues associated with neurodegenerative disorders. Most cannabinoids and endocannabinoids bind to both receptor types. CB1 is a protein typically targeted by delta-9-THC, the main compound in cannabis known for its euphoric and intoxicating effects. The role that CB2 plays in neurodegeneration has become increasingly recognized. The activation of CB2 has been shown to attenuate the activation of microglia and astrocytes and reduce ensuing microglial mediated neuroinflammation. Conversely, increased microglial activation, pathology, and inflammation were observed in CB2 knockout mice. Reduction of the inflammation in turn has led to improvements in function across a range of neurodegenerative diseases.

A body of evidence is growing that supports CB2 targeting in various degenerative diseases, with an increase in CB2 notably observed in patients with Alzheimer's disease. There has also been recent interest in targeting CB2 in Parkinson's disease as the presence of CB2 has been shown to be up-regulated in glial elements in Parkinson's disease patients. The Michael J. Fox Foundation for Parkinson's Research is running animal model studies evaluating the effect of CB2 modulation in Parkinson's disease patients and exploring their anti-inflammatory and neuroprotective potential. The role of CB2 has also been implicated in Huntington's disease, where CB2 presence has been upregulated, and receptor-mediated agonism has been shown to attenuate microglial activation. Additionally, a protective effect of CB2 activation in microglial cells upon inflammatory-induced CNS damage has been demonstrated in mouse models for multiple sclerosis.

Our Solution

LP143 in ALS and Other Neurodegenerative Diseases

We are developing LP143, a centrally acting, full CB2 agonist for neurodegenerative diseases associated with neuroinflammation caused by microglial activation. CB2 agonism has been shown in preclinical studies to regulate neuroinflammatory processes, reducing the neuronal damage characteristic of degeneration. We believe there is a strong rationale for CB2 agonism in neurodegenerative diseases, given increased CB2 expression in patients with these diseases as well as results from animal models. We see potential for a selective CB2 agonist to treat a range of neurodegenerative diseases. LP143, through its selectivity for CB2, versus CB1, was designed to minimize the risk of psychoactive AEs associated with CB1 activation. Our initial focus is on ALS. Most ALS patients experience rapid disease progression and poor prognosis, with paralysis and death seen within a span of two to five years. Preclinical data have demonstrated the benefit of CB2 agonism in a mouse model of ALS, with treated mice demonstrating delays in loss of motor function and improved survival. In preclinical studies, LP143 has demonstrated 1,000-fold greater selectivity for CB2 over CB1, sustained activity over the duration of treatment, and favorable blood-brain-barrier penetration. LP143 demonstrated sustained activity over the five day duration of treatment in a monosodium iodoacetate osteoarthritis model in rats ($n = 8$). Vehicle had no effect in the experiment, whereas morphine's activity was observed at Day 1, but had diminished by Day 3, and by Day 5 was non-existent, suggesting tachyphylaxis, or rapidly diminishing response to successive doses of a drug. The activity of LP143 remained significantly constant to vehicle from Day 1 to Day 5 indicating no tachyphylaxis compared to morphine ($p < 0.001$). LP143 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the first quarter of 2022.

In the description of our preclinical studies above and elsewhere in this prospectus, n represents the number of subjects in a particular group and p or p-values represent the probability that random chance caused the result (e.g., a p-value of 0.001 means that there is a 0.1% probability that the difference between the placebo group and the treatment group is purely due to random chance). A p-value of less than or equal to 0.05 is a commonly used threshold for identifying statistically significant outcomes.

LP659, a centrally acting, S1P1,5 modulator

We are developing LP659, a centrally acting, S1P1,5 receptor modulator for neurodegenerative diseases. LP659 was designed for optimized pharmacology, PK and engagement of S1P1,5, which may lead to improved

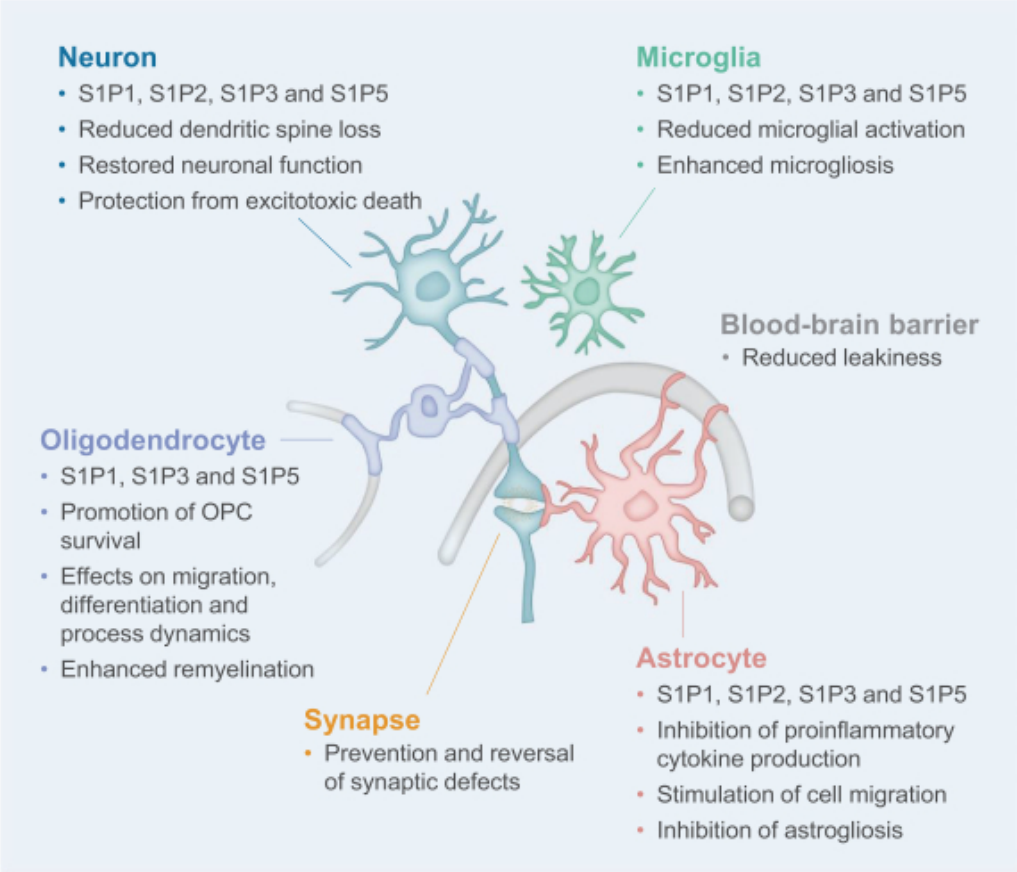
efficacy and safety. LP659 was designed to avoid the negative effects connected to the receptor subtypes 2 and 3, which may be associated with more serious, off-target cardiac, pulmonary, and cancer-related effects. Aberrant S1P receptor modulation has been shown to be involved in a wide range of neurodegenerative diseases, including multiple sclerosis, Lupus, Parkinson's disease and Alzheimer's disease. Preclinical data demonstrated an initial dose-dependent decrease in disease progression over 17 days in a mouse model of demyelinating disease. LP659 rapidly reduced circulating lymphocytes, which returned to baseline after its clearance. In a PK/PD study to assess LP659 effects on lymphocytes in rats, male rats were given a 0.00 (vehicle control), 0.300 or 1.00 mg/kg oral dose of LP659 (n=3 per dosing group). AR252124, the positive control for blood lymphopenia was given as an oral dose (n=4) at 1.00 mg/kg as a positive control for blood lymphopenia. Blood samples were collected at 0, 1, 3, 5, 8, 16, 24, 32, 48 and 72 hours post-dose for blood lymphocyte and plasma drug concentration measurements. LP659 at both doses demonstrated a rapid reduction in lymphocytes which returned to baseline, whereas no return to baseline was observed for AR252124 over the study duration.

A study of CNS distribution of LP659 was conducted in rats. Male rats were dosed orally with LP659 at 1.00 mg/kg for six consecutive days. On Day 6, plasma, brain and cerebrospinal fluid samples were taken at 0, 1, 3, 5, 8, and 24 hours post-last dose (n = 3 per time point). The maximum plasma concentration of LP659 was 551 ng/mL at 3.00 hour post-dose. The maximum brain concentration of LP659 was 947 ng/mL at 8.00 hour post-dose. The mean brain to plasma ratios of LP659 at 0, 1, 3, 5, 8, and 24 hours post-last dose were 2.87, 1.25, 1.17, 1.68, 1.98, and 2.94, respectively. We believe LP659 has high oral bioavailability with a direct impact on CNS glial cell S1P receptors. LP659 is currently in IND-enabling studies and we anticipate submitting an IND to the FDA in the second half of 2022.

S1P Receptors

S1P receptor modulators are expressed broadly in the CNS. By limiting lymphocyte circulation, S1P receptor modulators exert anti-inflammatory effects. Multiple S1P receptor modulators have been approved for the treatment of relapsing forms of multiple sclerosis. There are five known receptor types: S1P1, S1P2, S1P3, S1P4 and S1P5. S1P1, S1P2 and S1P3 receptors are expressed broadly, S1P4 is primarily expressed in immune system cells, and S1P5 is expressed primarily in the spleen and CNS. Astrocytes are the most abundant cells in the human CNS and preferentially express S1P3 and S1P1 and express S1P2 at low levels. Oligodendrocytes, oligodendrocyte precursor cells (OPC), neurons, and microglia are other brain cells that express S1P.

The various brain cell types are illustrated in the below:



Our Solution

LP659 in Neurodegenerative Diseases

LP659 acts as a S1P1 and S1P5 receptor subtypes modulator with no observed impact on S1P2 or S1P3 and has been selectively developed to cross the blood-brain barrier and target neurodegenerative diseases. The S1P receptor has been well-validated in slowing the progression of neurodegeneration, notably in multiple sclerosis, for which disease area the FDA has approved three S1P receptor modulators. LP659 was designed to avoid the negative effects connected to the receptor subtypes 2 and 3, which may be associated with more serious, off-target cardiac, pulmonary, and cancer-related effects. Though initial studies have been run in a widely accepted model of demyelinating disease (e.g. multiple sclerosis), we have not finalized a target indication as we see potential for a selective S1P1 receptor modulator to treat a spectrum of neurodegenerative diseases.

License Agreement with Arena

In October 2020, we entered into the Arena License Agreement with Arena. Pursuant to the Arena License Agreement, Arena granted us an exclusive, royalty bearing, sublicensable, worldwide license under certain know-how and patents of Arena to develop and commercialize LP352 for any use in humans, LP143 for the treatment of any CNS indication in humans (excluding the treatment, prevention or amelioration of pain or any

gastrointestinal, non-CNS autoimmune or cardiovascular disorder), and LP659 for the treatment of selected CNS indications in humans (pharmaceutical products containing any such compounds, Licensed Products). Arena further granted us a covenant not to sue under any patents or certain information of Arena with respect to each Licensed Product in its respective field. We agreed not to use the licensed intellectual property with respect to LP352 for weight loss, weight management or obesity as long as we remain an affiliate of Arena. Arena retained the exclusive right to use the licensed intellectual property to develop, make or use intermediates, pro-drugs and metabolites related to the LP352, LP143 and LP659 compounds to exploit Arena's etrasimod, lorcaserin, nelotanserin, olorinab, or temanogrel products, in any dosage strength or formulation, and we granted Arena a covenant not to sue with respect to such activities under certain of our intellectual property related to such compounds and the Licensed Products. We will assign to Arena new intellectual property developed by us related to such compounds. We have sole responsibility over development, regulatory and commercialization activities for the Licensed Products in the applicable fields, as well as commercial manufacture and supply therefor. We are required to use commercially reasonable efforts to perform certain development and regulatory activities for an LP143 product and a LP659 product in the applicable fields, seek regulatory approval therefor in the United States and the EU, and following regulatory approval, to commercialize such Licensed Product.

As consideration for the rights granted to us under the Arena License Agreement, we will be required to pay to Arena a mid-single digit royalty on net sales of Licensed Products of LP352, and a low-single digit royalty on net sales of all other Licensed Products, by us, our affiliates or our sublicensees, subject to standard reductions. Our royalty obligations continue on a Licensed Product-by-Licensed Product and country-by-country basis until the later of the (i) tenth anniversary of the first commercial sale of such product in such country or (ii) expiration of the last-to-expire valid claim of the patents licensed to us under the Arena License Agreement covering the manufacture, use or sale of such product in such country, which we expect to extend until 2036 for LP352, until 2029 for LP659 and 2030 for LP143.

We may unilaterally terminate the Arena License Agreement for any reason with a specified prior notice period, and Arena may terminate the Arena License Agreement if we challenge any of the licensed patents. Either party may terminate the Arena License Agreement in the event of the other party's insolvency or for the other party's uncured material breach of the Arena License Agreement. Absent early termination, the Arena License Agreement will automatically expire upon the expiration of all our payment obligations under the Arena License Agreement.

Services Agreement with Arena

In October 2020, we entered into a Services Agreement with Arena (Services Agreement) under which Arena agreed to perform certain research and development services, general administrative services, management services and other mutually agreed services for us and receive service fees therefor on an hourly rate based on an annual full time equivalent rate of $395,000. As part of such performance of services, Arena will assign, and we will assume, certain third-party contracts related to the Licensed Products. Under the Services Agreement, Arena will assign to us the results of the services performed for us, along with the intellectual property rights in the foregoing, excluding certain intellectual property rights to be retained by Arena pursuant to the Arena License Agreement or otherwise designated to be owned by Arena in the Research and Development Plan under the Services Agreement. The term of the Services Agreement will continue until December 31, 2021, and will automatically renew for successive one-year terms, unless either party desires not to renew prior to the expiration of the then-current term. Each party may also terminate the Services Agreement for any reason, subject to specified notice periods.

Intellectual Property

Our success depends in part on our ability to obtain and maintain proprietary protection for our 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 the proprietary rights of

others, and in part, on our ability to prevent others from infringing our proprietary rights. A comprehensive discussion on risks relating to intellectual property is provided under the section of this prospectus entitled "Risk Factors—Risks Related to Our Intellectual Property."

As of February 1, 2021, we held an exclusive, worldwide license to issued and pending patent claims for compositions of matter and certain methods of treatment using LP352 in several jurisdictions, including issued patents in the United States, Europe (17 countries), Japan, Mexico, Australia and Russia, and pending applications in China, Brazil, Canada, India, South Korea, New Zealand, and Israel. The terms of these patents (and applications, if issued) are capable of continuing into 2036, without taking into account any patent term adjustment or extension regimes of any country (e.g., up to five additional years in certain jurisdictions if maximum PTE or SPC applies) or any additional term of exclusivity we might obtain by virtue of later filed patent applications.

As of February 1, 2021, we held an exclusive, worldwide license to issued and pending patent claims for compositions of matter and certain methods of treatment using LP659 in several jurisdictions, including issued patents in the United States, Europe (39 countries), China, Japan, Canada, South Korea, Australia, Mexico, South Africa, New Zealand, Singapore, Israel, and Eurasia, and a pending application in Brazil. The terms of these patents (and applications, if issued) are capable of continuing into 2029, without taking into account any patent term adjustment or extension regimes of any country (e.g., up to five additional years in certain jurisdictions if maximum PTE or SPC applies) or any additional term of exclusivity we might obtain by virtue of later filed patent applications.

As of February 1, 2021, we held an exclusive, worldwide license to issued and pending patent claims for compositions of matter and certain methods of treatment using LP143 in several jurisdictions, including issued patents in China, Japan, Canada, India, Eurasia (9 countries), South Korea, Australia, Mexico, Taiwan, New Zealand, and Israel, and pending applications in the United States, Europe, Venezuela, Brazil, Argentina, South Africa, Bangladesh, Hong Kong, and the GCC. The terms of these patents (and applications, if issued) are capable of continuing into 2030, without taking into account any patent term adjustment or extension regimes of any country (e.g., up to five additional years in certain jurisdictions if maximum PTE or SPC applies) or any additional term of exclusivity we might obtain by virtue of later filed patent applications.

In addition to patent protection, we rely on trade secret protection, trademark protection and know-how to expand our proprietary position around our chemistry, technology and other discoveries and inventions that we consider important to our business. We are a party to a license agreement under which we are granted intellectual property rights to know-how that are important to our business. We have licensed know-how related to the LP352, LP143 and LP659 compounds in all countries around the world from Arena. The Arena License Agreement imposes various development, regulatory and/or commercial diligence obligations, payment of royalties, including a mid-single digit royalty on net sales of Licensed Products of LP352, and a low-single digit royalty on net sales of all other Licensed Products, by our company, its affiliates or its sublicensees, subject to standard reductions, and other obligations.

We also seek to protect our intellectual property by having confidentiality terms in our 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.

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 of our approved products. We expect to manage sales, marketing and distribution through internal resources and third-party relationships. While we may commit significant financial and management resources to commercial activities, we will also consider collaborating with one or more pharmaceutical companies to enhance our commercial capabilities.

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently rely, and expect to continue to rely for the foreseeable future, on third parties for the manufacturing of our product candidates for preclinical and clinical testing, as well as for commercial manufacture of any products that we may commercialize. We expect to initially obtain our supplies from manufacturers on a purchase order basis without long-term supply arrangements in place. We do not currently have arrangements in place for redundant supply for active pharmaceutical ingredients (APIs) and drug product. For all of our product candidates, we intend to identify and qualify manufacturers to provide the APIs and drug product prior to submission of a New Drug Application (NDA) to the FDA or other marketing authorization applications to other regulatory authorities.

All our product candidates are compounds of low molecular weight, generally called small molecules. They can be manufactured from readily available starting materials in reliable and reproducible synthetic processes that are amenable to scale-up and do not require specialized equipment in the manufacturing process. We expect to continue to develop product candidates that can be produced cost-effectively at contract manufacturing facilities.

Competition

The biopharmaceutical industry is characterized by rapidly advancing competition and a strong emphasis on proprietary drugs. We face competition with respect to our current product candidates and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide.

DEEs are commonly treated with multiple combinations of AEDs though physician preference for administered therapies differs across different epilepsy types. Pharmaceutical companies, such as Eisai, Lundbeck, Pfizer, and UCB have approved AEDs for the treatment of epilepsies. There are also non-pharmaceutical therapies for epilepsy patients, such as a ketogenic diet, VNS, and surgery for some patients. Recently, two companies have obtained FDA approval for symptoms associated with DEEs. Fenfluramine was approved for the treatment of seizures associated with Dravet syndrome on June 25, 2020, and became available through a REMS program in July 2020, and cannabidiol was approved by the FDA for the treatment of seizures associated with Dravet syndrome and Lennox-Gastaut syndrome in 2018. Lorcaserin also is in a Phase 3 clinical trial for the treatment of seizures associated with Dravet syndrome. In addition, other companies are developing therapeutics for the treatment of epilepsies, including alternative approaches such as gene therapy.

There is currently no cure for ALS. Rilutek (riluzole) and Radicava (edaravone) are the only FDA approved drugs that have been observed to slow disease progression in ALS. There are a number of companies seeking to developing treatments for ALS.

In the S1P receptor modulator space, there are three drugs that have been approved by the FDA for the treatment of certain indications in multiple sclerosis: fingolimod, ozanimod, and siponimod. There are multiple additional S1P receptor modulators in development for additional therapeutic indications beyond multiple sclerosis, including in other neurodegenerative diseases. There are also numerous other drugs and product candidates in development for indications for which we might develop our product candidates.

Additional potential competitors include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the indications that we are

pursuing. More established companies may have a competitive advantage over us due to their greater size, resources and institutional experience. In particular, these companies have greater experience and expertise in securing reimbursement, government contracts, relationships with key opinion leaders, conducting testing and clinical trials, obtaining and maintaining regulatory approvals and distribution relationships to market products, and marketing approved drugs. These companies also have significantly greater research and marketing capabilities than we do.

The key competitive factors affecting the success of our product candidates are likely to be their efficacy and safety, the scope and limitations of marketing approval, success of regulatory approval, successful protection of our intellectual property, and the availability of funding and reimbursement.

Government Regulation and Product Approval

As a pharmaceutical 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. Product 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 (FDCA), and implementing regulations. A new drug must be approved by the FDA through the NDA process before it may be legally marketed in the United States. 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 preclinical laboratory tests, preclinical animal studies and formulation studies in accordance with applicable regulations, including the FDA's Good Laboratory Practice (GLP) regulations and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board (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 good clinical practice (GCP) regulations to establish the safety and efficacy of the proposed drug for its proposed indication;
- submission to the FDA of an NDA after completion of all pivotal trials;
- 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 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 preclinical and/or clinical trial sites that generated the data in support of the NDA to assess compliance with GCP regulations;
- 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 preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies, to assess the potential safety and activity of the drug candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The sponsor must submit the results of the preclinical 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 preclinical 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 sponsor and the FDA must resolve any outstanding concerns 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.

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 participants 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 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 participants 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. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

- Phase 3. The drug is administered to an expanded patient population to further evaluate dosage and clinical efficacy 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.

During the development of a new drug, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach agreement on the next phase of development. Sponsors typically use the meetings at the end of the Phase 2 trial to discuss Phase 2 clinical results and present plans for the pivotal Phase 3 clinical trials that they believe will support approval of the new drug.

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 AEs or any finding from tests in laboratory animals that suggests a significant risk for human participants. 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 participants 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, preclinical 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 (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 need 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 (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 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, preclinical 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 are 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 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. If an orphan designated product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan exclusivity.

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. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a fast track product has opportunities for more frequent interactions with the applicable FDA review team during product development and, once a NDA is submitted, the product candidate may be eligible for priority review. With regard 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 is designed to treat a serious condition, and if approved, would provide 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. The FDA endeavors to review applications with priority review designations within six months of the filing date as compared to ten months for review of new molecular entity NDAs under its current PDUFA review goals.

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 to verify the predicted clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required clinical trials, or if such trials fail to verify the predicted clinical benefit. 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.

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.

Fast track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval but may expedite the development or approval process. 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, such designations or shortened review periods may not provide a material commercial advantage.

Post-Approval Requirements

Any drug products manufactured or distributed pursuant to 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. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual program fees for any marketed products.

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. 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. 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 may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information, imposition of post-market studies or clinical studies to assess new safety risks, or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters, or untitled letters;
- clinical holds on clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of drug products. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined companies from engaging in off-label promotion. The FDA and other regulatory agencies have also required that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labelling.

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 patent term extension under the Drug

Price Competition and Patent Term Restoration Act of 1984, commonly referred to as 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. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. 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 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 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.

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 (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 preclinical 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.

DEA Regulation

The CSA establishes registration, security, recordkeeping, reporting, storage, distribution and other requirements administered by the DEA. The DEA is concerned with the control of handlers of controlled substances, and with the equipment and raw materials used in their manufacture and packaging, in order to prevent loss and diversion into illicit channels of commerce. The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use, and may not be marketed or sold in the United States. A pharmaceutical product may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances.

Annual registration is required for any facility that manufactures, distributes, dispenses, imports or exports any controlled substance. The registration is specific to the particular location, activity and controlled substance schedule. For example, separate registrations are needed for import and manufacturing, and each registration will specify which schedules of controlled substances are authorized. The DEA typically inspects a facility to review its security measures prior to issuing a registration. Security requirements vary by controlled substance schedule, with the most stringent requirements applying to Schedule I and Schedule II substances. Required security measures include background checks on employees and physical control of inventory through measures such as cages, surveillance cameras and inventory reconciliations. Records must be maintained for the handling of all controlled substances, and periodic reports made to the DEA. Reports must also be made for thefts or losses of any controlled substance, and authorization must be obtained to destroy any controlled substance. In addition, special authorization and notification requirements apply to imports and exports.

To meet its responsibilities, the DEA conducts periodic inspections of registered establishments that handle controlled substances. Failure to maintain compliance with applicable requirements, particularly as manifested in loss or diversion, can result in enforcement action that could have a material adverse effect on our business, results of operations and financial condition. The DEA may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to revoke those registrations. In certain circumstances, violations could eventuate in criminal proceedings. Individual states also regulate controlled substances, and we and our contract manufacturers will be subject to state regulation on distribution of these products.

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 physician sunshine 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. 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, 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.

The federal false claims laws, including the False Claims Act, which prohibit, 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 under the False Claims Act includes “any request or

demand" for money or property presented to the U.S. government. The federal civil False Claims Act can be enforced through private "qui tam" actions brought by individual whistleblowers in the name of the government. In addition, manufacturers can be held liable under the civil False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. Pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, 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. In addition, a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act.

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) also created new federal criminal statutes that prohibit, among other things, 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. 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. 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, 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 (currently defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, certain ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, applicable manufacturers will also be required to report information regarding payments and other transfers of value provided during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, anesthesiologist assistants and certified nurse-midwives.

Numerous state, federal and foreign laws, self-regulatory schemes, regulations, and standards govern the collection of, disclosure of, use of, access to, transfer of, and confidentiality and security of personal information and health-related information, and could apply now or in the future to our operations or the operations of our partners. For example, In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy laws, and federal and state consumer protection laws and regulations (e.g., Section 5 of the FTC Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our partners. For example, HIPAA, as amended by HITECH and regulations implemented thereunder, imposes requirements relating to the privacy, security and transmission of individually identifiable health information on covered entities," including certain healthcare providers, health plans, and healthcare clearinghouses, and their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, as well as their covered subcontractors. Entities that are found to be in violation of HIPAA as the result of a breach of unsecured protected health information, a complaint about privacy practices or an audit by HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. Further, entities that knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA covered entity in a manner that is not authorized or permitted by HIPAA may be subject to criminal penalties.

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. For instance, California recently enacted the California Consumer Privacy Act (CCPA), which went into effect on January 1, 2020. The CCPA 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 information of consumers or households. The CCPA, among other things, creates new data privacy obligations for covered companies and provides new privacy rights to California residents, including the right 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 also creates a private right of action with statutory damages for certain data breaches, thereby potentially increasing risks associated with a data breach. Further, a new privacy law, the California Privacy Rights Act (CPRA), was approved by California voters on November 3, 2020. When it goes into effect on January 1, 2023, the CPRA will modify significantly the CCPA, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply. Both the CCPA and CPRA could impact our business activities depending on how they are interpreted and exemplifies the vulnerability of our business to not only cyber threats but also the evolving regulatory environment related to personal data and protected health information.

We also are or will become subject to applicable 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, if we conduct EU-based clinical trials, we will be subject to the GDPR in relation to our collection, control, processing and other use of personal data of data participants within the European Economic Area (EEA) (i.e. data relating to an identifiable living individual). We process personal data in relation to participants in our clinical trials in the EEA, including the health and medical information of these participants. The GDPR is directly applicable in each EU and EEA Member State, however, it provides that EU and EEA 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 activities and implement policies as part of its mandated privacy governance framework. It also requires data controllers to be transparent and disclose to data participants (in a concise, intelligible and easily accessible form) how their personal data is to be used, imposes limitations on retention of personal data; defines for the first time 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 also subject to EU rules with respect to cross-border transfers of personal data out of the EU and EEA. We are subject to the supervision of local data protection authorities in those EU jurisdictions where we are established or otherwise subject to the GDPR, and we maintain an office in Switzerland, which has its own set of stringent privacy and data protection laws and regulations. More specifically, the Swiss Federal Act on Data Protection, or DPA, applies to the collection and processing of personal data, including health-related information, by companies located in Switzerland, or in certain circumstances, by companies located outside of Switzerland. The DPA has been revised and adopted by Parliament, and the revised version and its revised ordinances are expected to enter into force in 2022. This revised law may result in an increase of costs of compliance, risks of noncompliance and penalties for noncompliance. Fines for certain breaches of the GDPR are significant: up to the greater of €20 million or 4% of total global annual turnover. 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 EU, including a recent decision by the Court of Justice for the EU 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. Switzerland has adopted similar restrictions under the DPA. Although there are legal mechanisms to

allow for the transfer of personal data from the EEA and Switzerland to the United States, they are subject to legal challenges and uncertainty about compliance with EU and Swiss data protection laws remains. There are similar uncertainties around data transfers to and from the United Kingdom following its departure from the EU and the end of the transition period.

Further, the vote in the United Kingdom in favor of exiting the EU, 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. Beginning in 2021, the United Kingdom became a "third country" under the GDPR.

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 also 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 significant 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.

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 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, no uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. As a result, 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.

Different pricing and reimbursement schemes exist in other countries. In the EU, 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 Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively ACA), was enacted, which affected existing government healthcare programs and resulted in the development of new programs.

Among the ACA'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 (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.

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. For example, 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 inseverable 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 United States Court of Appeals for the 5th Circuit upheld the District Court ruling 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. The case is currently under review by the United States Supreme Court. It is unclear how such litigation and other efforts, if any, to challenge, repeal or replace the ACA will impact the ACA or our business.

Other legislative changes have also been proposed and adopted in the United States since the Healthcare Reform Act 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 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2021, unless additional Congressional action is taken. 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.

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. In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition, and results of operations. Further, it is possible that additional governmental action is taken in response to the evolving effects of the COVID-19 pandemic. Additionally, health reform initiatives may arise in the future, particularly as a result of the recent presidential election.

The U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act of 1977 (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 an application for a clinical trial authorization (CTA) much like the IND prior to the commencement of human clinical trials. In the EU, for example, a CTA must be submitted to each country's national health authority and an application made to an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements and a favorable ethics committee opinion has been issued, 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 EU 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 by the European Commission following a favorable opinion by the EMA that is valid in all EU 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, other immune dysfunctions and viral diseases. The centralized procedure is optional for other products that represent a significant therapeutic, scientific or technical innovation, or whose authorization would be in the interest of public health or which contain a new active substance for indications other than those specified to be compulsory.

National authorization procedures. There are also two other possible routes to authorize medicinal products in several EU 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 EU Member State of medicinal products that have not yet been authorized in any EU Member State and that do not fall within the mandatory scope of the centralized procedure.
- Mutual recognition procedure. In the mutual recognition procedure, a medicine is first authorized in one EU Member State, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other EU 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 for the treatment, prevention or diagnosis of life-threatening or chronically debilitating conditions affecting not more than five in 10,000 people in the EU. In addition, orphan drug designation can be granted if the drug is intended for a life threatening or chronically debilitating condition in the EU and without incentives it is unlikely that sales of the drug in the EU would be sufficient to justify the investment required to develop the drug. Orphan drug designation is only available if there is no other satisfactory method approved in the EU 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 or reduced-fee protocol assistance, fee reductions for marketing authorization applications and other post-authorization activities 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 EU, 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 February 1, 2021, we employed six employees, all of whom are full-time, consisting of clinical, research, operations, finance and business development personnel. One of our employees holds an M.D. degree. None of our employees is subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

Facilities

We lease certain office space in San Diego, California under a month to month lease. Rent payments are approximately $1,000 per month. We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

Legal Proceedings

We are currently not a party to any material legal proceedings.

MANAGEMENT

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of March 7, 2021.

Name	Age	Position
Executive Officers:		
Kevin R. Lind	44	President, Chief Executive Officer and Director
Brandi L. Roberts	47	Chief Financial Officer
Philip Perera, M.D.	68	Chief Medical Officer
Non-Employee Directors		
Vincent E. Aurentz	53	Director
Corinne Le Goff, Pharm.D.(1)(3)	55	Director
Casey C. Lynch(2)(3)	47	Director
Phillip M. Schneider(1)(3)	64	Director
Paul J. Sekhri(1)(2)	62	Chairman

(1) Member of the compensation committee.
(2) Member of the nominating and corporate governance committee.
(3) Member of the audit committee.

Executive Officers

Kevin R. Lind has served as our President and Chief Executive Officer since March 2020 and as director since our inception in January 2020. Mr. Lind served as our Chief Financial Officer from our inception in January 2020 to January 2021. Mr. Lind previously served as the Executive Vice President and Chief Financial Officer of Arena from June 2016 to March 2020. Prior to joining Arena, Mr. Lind was a Principal focused on healthcare at TPG Special Situations Partners, a global investment firm, from January 2009 to June 2016. Mr. Lind was a member of the TPG Pharma Partners effort at TPG-Axon Capital, a global investment firm, from 2006 to 2008. He served in various capacities as a healthcare investment banker at Lehman Brothers, Inc., a former global financial services firm, from 1998 to 2002 and 2004 to 2006. Mr. Lind received a B.S. from Stanford University in Biological Sciences and an M.B.A. from UCLA Anderson School of Management. We believe Mr. Lind's perspective and experience as our President and Chief Executive Officer and previously as our Chief Financial Officer, as well as his extensive executive experience at Arena, qualify him to serve on our board of directors.

Brandi L. Roberts has served as our Chief Financial Officer since January 2021. Prior to joining us, Ms. Roberts served as Chief Financial Officer for Lineage Cell Therapeutics, Inc., a clinical-stage biotechnology company, from January 2019 to January 2021. From August 2017 to January 2019, Ms. Roberts served as Chief Financial Officer at REVA Medical, Inc. (Reva), a medical device company. Subsequently, Reva filed a prepackaged voluntary Chapter 11 bankruptcy petition on January 14, 2020 and emerged from bankruptcy protection in United States effective February 26, 2020. Ms. Roberts previously served as Chief Financial Officer at Mast Therapeutics, Inc., a publicly traded U.S.-based biopharmaceutical company, from January 2013 to April 2017, having served as its Senior Vice President, Finance from March 2011 to January 2013. Previously, Ms. Roberts held senior positions at Alphatec Spine, Inc., Artes Medical, Inc., Stratagene Corporation and Pfizer, Inc. Ms. Roberts currently serves as Chair of the Southern California Chapter of the Association of Bioscience Financial Officers and has served on the Board of Temple Therapeutics BV since November 2019. Ms. Roberts brings more than 25 years of public accounting and finance experience, including 22 years at publicly traded pharmaceutical, medical technology and life science companies, to her position. Ms. Roberts is a certified public accountant with the State of California and received her B.S. degree in business administration from the University of Arizona and her M.B.A. from the University of San Diego.

Philip Perera, M.D. has served as our Chief Medical Officer since November 2020. Prior to his appointment as our Chief Medical Officer, Dr. Perera served as a Pharmaceutical Clinical Development Consultant for us from June 2020 to October 2020 where he focused on CNS disorders and was active in fundraising and all aspects of early development and late phase clinical development planning. Dr. Perera also served as a Senior Medical Consultant Clinical Development to Sage Therapeutics, a biopharmaceutical company, from June 2018 to October 2020, a Consulting Chief Medical Officer and Clinical Lead for Abcentra LLC, a biopharmaceutical company, from June 2018 to September 2020, and a Senior Medical Consultant at ConSynance Therapeutics, Inc., a biopharmaceutical company, from June 2018 to June 2019. Prior to that, Dr. Perera served as a director and Chief Medical Officer, V.P. Development at Dart Neuroscience, Inc., a pharmaceutical company, from December 2009 to June 2018. Dr. Perera previously held senior level clinical, scientific, management and business development positions at GlaxoSmithKline plc, Pharmacia & Upjohn Company LLC, Jazz Pharmaceuticals plc, Pfizer Inc. and the Parkinson's Institute. Prior to working in the pharmaceutical industry Dr. Perera was on the faculty of New York Hospital, Cornell Medical College as Chief of Inpatient Services at North Shore University Hospital, and he was a practicing adult and geriatric psychiatrist. Dr. Perera is a graduate of Harvard Medical School and a board-certified Psychiatrist. He also holds a M.B.A. from Arizona State University and a B.S. from State University of New York College at Old Westbury.

Non-Employee Directors

Vincent E. Aurentz has served as a member of our board of directors since February 2020. Mr. Aurentz has served as the Executive Vice President and Chief Business Officer of Arena since August 2016. Mr. Aurentz has over 30 years of experience in the biopharmaceutical industry. Previously, he was the Chief Business Officer of Epirus Biopharmaceuticals, Inc. a biopharmaceutical company, from November 2015 to July 2016. Prior to that, Mr. Aurentz served as President and was a member of the Board of Directors of HemoShear Therapeutics, LLC from July 2013 to November 2015, where he oversaw the scientific platform, research and development activities, commercial and business development efforts including collaborations with global organizations such as Pfizer, Eli Lilly, Janssen research and development and Children's National Health System. Prior to joining HemoShear, Mr. Aurentz was Executive Vice President and member of the Executive Management Board at Merck KGaA (Merck Serono S.A.) where he directed research and development programs, portfolio strategy and headed all deal activity and venture investments. Mr. Aurentz is a former Executive Vice President at Quintiles and a Co-founder and Managing Director of a venture capital and advisory business. He was a partner with CSC Healthcare, the life sciences strategic management consulting division of Computer Sciences Corporation, after starting his career and working for 8 years at Andersen Consulting (now Accenture). Mr. Aurentz received a B.S. in Mathematics from Villanova University. We believe that Mr. Aurentz's extensive experience in the biopharmaceutical industry and as an executive in public companies qualify him to serve on our board of directors.

Corinne Le Goff, Pharm.D. has served as a member of our board of directors since March 2021. Dr. Le Goff has served as Chief Commercial Officer of Moderna, Inc., a publicly traded clinical stage biotech and pharmaceutical company, since January 2021. Dr. Le Goff previously served as Senior Vice President and General Manager of the U.S. Business Organization at Amgen, Inc., a public biotechnology company, from March 2019 to January 2021. During her tenure at Amgen, she also served as Senior Vice President of Global Product Strategy from June 2018 to March 2019, and Senior Vice President of the Europe Region from June 2015 to May 2018. Dr. Le Goff worked in the policy community and advocated for innovative, high-quality and affordable healthcare. Dr. Le Goff held various positions within the Roche Group, a publicly traded Swiss multinational healthcare company, including President of Roche's French affiliate from May 2012 to May 2015. Dr. Le Goff has served on the board of directors of the Pacific Council on International Policy since October 2019. Dr. Le Goff also served on the board of directors of CFAO, a trading company, from October 2014 until October 2020, where she served as a member of the Nomination and Compensation Committee, the Sustainable Development Committee and the Audit Committee. Dr. Le Goff received a Pharm. D. from the University Paris V and an M.B.A. in Marketing from La Sorbonne University, France. We believe Dr. Le Goff's substantial experience in managing biopharmaceutical companies qualifies her to serve on our board of directors.

Casey C. Lynch has served as a member of our board of directors since February 2021. Ms. Lynch previously co-founded and has served as President and Chief Executive Officer and a member of the board of directors of Cortexyme, Inc., a public biotechnology company, since July 2014, and as Chairman of Cortexyme's board of directors since November 2018. She has been a member of the board of directors of the California Life Science Association, a trade association representing California's life science industry, since August 2019. Prior to co-founding Cortexyme, Ms. Lynch co-founded various companies and organizations in the biotechnology industry including Aspira Biosystems, Inc. and NeuroInsights, LLC. She served as Aspira's co-founder, President, Chief Executive Officer and Chairman from 1999 to 2004 and she co-founded NeuroInsights and served as its Managing Director from 2004 to 2015. Ms. Lynch also co-founded Neurotechnology Industry Organization, a non-profit trade association, and served as a board member from March 2005 to September 2018. Ms. Lynch holds a B.S. in Neuroscience from the University of California, Los Angeles, and an M.S. in Neuroscience from the University of California, San Francisco. We believe that Ms. Lynch's operational and historical expertise, as well as her extensive professional and educational experience in the biotechnology industry qualify her to serve on our board of directors.

Phillip M. Schneider has served as a member of our board of directors since December 2020. Most recently, Mr. Schneider held various positions with IDEC Pharmaceuticals Corporation, a biopharmaceutical company, from 1987 to 2003, including, serving as Senior Vice President and Chief Financial Officer from 1997 to 2003. Prior to that, Mr. Schneider held various management positions at Syntex Pharmaceuticals Corporation, a pharmaceutical company, from 1985 to 1987, and KPMG LLP, an audit and tax advisory firm, from 1982 to 1984, where he attained his CPA license. Mr. Schneider currently serves as a member of the board of directors of ARS Pharmaceuticals, Inc, a pharmaceutical company, since June 2019, and YMCA of San Diego County since 2002. Mr. Schneider previously served as a member of the board of directors at Pfenex Inc. from 2014 until its acquisition by Ligand Pharmaceuticals in 2020, Arena from 2007 to 2018, Auspex Pharmaceuticals from 2014 until its acquisition by Teva Pharmaceuticals in 2015, and Gen-Probe, Inc. from 2002 until its acquisition by Hologic Inc. in 2012. Mr. Schneider holds a B.S. in Biochemistry from the University of California, Davis and an M.B.A. from the University of Southern California. We believe Mr. Schneider's extensive experience in finance and accounting and his experience in the biopharmaceutical industry qualify him to serve on our board of directors.

Paul J. Sekhri has served as a member of our board of directors since December 2020 and as chairman of our board of directors since February 2021. Mr. Sekhri has served as the President and CEO of eGenesis, Inc., a biotechnology company, since January 2019. Prior to joining eGenesis, Inc., Mr. Sekhri served as President and Chief Executive Officer of Lycera Corp., a biopharmaceutical company, from February 2015 through December 2018. From April 2014 through January 2015, Mr. Sekhri served as Senior Vice President, Integrated Care at Sanofi. From May 2013 through March 2014, Mr. Sekhri served as Group Executive Vice President, Global Business Development and Chief Strategy Officer for Teva Pharmaceutical Industries Ltd. Prior to joining Teva, Mr. Sekhri spent five years as Operating Partner and Head of the Biotechnology Operating Group at TPG Biotech, the life sciences venture capital arm of TPG Capital. From 2004 to 2009, Mr. Sekhri was Founder, President, and Chief Executive Officer of Cerimon Pharmaceuticals, Inc. Prior to founding Cerimon, Mr. Sekhri was President and Chief Business Officer of ARIAD Pharmaceuticals, Inc. Previously, Mr. Sekhri spent five years at Novartis, as Senior Vice President, and Head of Global Search and Evaluation, Business Development and Licensing for Novartis Pharma AG. Mr. Sekhri also developed the Disease Area Strategy for Novartis, identifying those specific therapeutic areas upon which the company would focus. Mr. Sekhri's first role at Novartis was as Global Head, Early Commercial Development. Mr. Sekhri completed graduate work in Neuroscience at the University of Maryland School of Medicine, where he also received his B.S. in Zoology. Mr. Sekhri is currently a member of the Board of Directors of Veeva Systems Inc., Ipsen S.A., and BiomX, and Chairman of the Board of Compugen Ltd., and Pharming Group N.V. As an accomplished pianist, he serves on several non-profit Boards including as Chairman of the Board of The Knights and the Metropolitan Opera. Mr. Sekhri also served as a Member of the Board of Trustees of Carnegie Hall from 2010-2012, and recently founded the Life Science Council of Carnegie Hall where he is also an active member of their Patrons Council. We believe that Mr. Sekhri's extensive executive experience and experience in the pharmaceutical industry qualify him to serve on our board of directors.

Composition of Our Board of Directors

Our business and affairs are managed under the direction of our board of directors. We currently have six directors. Five of our current directors were appointed to serve as a member of our board of directors consistent with the provisions of a voting agreement dated October 27, 2020, by and among us and certain of our stockholders. Mr. Aurentz and Ms. Lynch were designated by Arena Pharmaceuticals, Inc. to serve on our board of directors. Mr. Lind was designated to serve on our board of directors as the serving Chief Executive Officer. Mr. Schneider and Mr. Sekhri were appointed to serve on our board of directors as independent directors who are not affiliates of us or of any of our investors. The voting agreement will terminate upon the closing of this offering, and thereafter 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 Mr. Lind and Dr. Le Goff, and their terms will expire at the annual meeting of stockholders to be held in 2022;
- the Class II directors will be Ms. Lynch and Mr. Aurentz, and their terms will expire at the annual meeting of stockholders to be held in 2023; and
- the Class III directors will be Mr. Sekhri and Mr. Schneider, and their terms will expire at the annual meeting of stockholders to be held in 2024.

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 Nasdaq, 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, our board of directors has determined that Ms. Lynch, Dr. Le Goff, Mr. Sekhri, and Mr. Schneider 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 listing standards. 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 “Certain Relationships and Related Person Transactions.”

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process. In particular our board of directors is responsible for monitoring and assessing strategic risk exposure. Our executive officers are responsible for the day-to-day management of the material risks we face. Our board of directors administers its oversight function directly as a whole. Our board of directors will also administer its oversight through various standing committees, which will be constituted prior to the closing of this offering and address risks inherent in their respective areas of oversight. For example, our audit committee will be responsible for overseeing the management of risks associated with financial reporting, accounting and auditing matters; our compensation committee will oversee the management of risks associated with our compensation policies and programs; and our nominating and corporate governance committee will oversee the management of risks associated with director independence, conflicts of interest, composition and organization of our board of directors and director succession planning.

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. 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 Mr. Schneider, Ms. Lynch and Dr. Le Goff, each of whom our board of directors has determined satisfies the independence requirements under the Nasdaq listing standards and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee is Mr. Schneider, 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 over financial reporting and financial-statement audits, as well as the quality and integrity of our financial statements and reports 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 and discussing with management and the independent registered public accounting firm, as appropriate, earnings press releases, and press releases containing information relating to material financial developments and earnings guidance provided to analysts and ratings agencies;
- 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 Mr. Sekhri, Mr. Schneider and Dr. Le Goff. The chair of our compensation committee is Mr. Sekhri. Our board of directors has determined that each member of our compensation committee is independent under the Nasdaq listing standards, 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 recommending to our board of directors the compensation of our chief executive officer, and reviewing and approving the compensation for our 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; 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 Ms. Lynch and Mr. Sekhri. The chair of our nominating and corporate governance committee is Ms. Lynch. Our board of directors has determined that each member of the nominating and corporate governance committee is independent under the Nasdaq listing standards, 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;

- reviewing, evaluating and recommending to our board of directors succession plans for our executive officers; and
- overseeing periodic evaluations of the board of directors' performance, including committees of the board of directors and management.

Code of Conduct

We have adopted a Code of Conduct 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 Conduct will be posted on our website at www.longboardpharma.com. We intend to disclose on our website any future amendments of our Code of Conduct 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 Conduct. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

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 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.

Director Compensation

Except as indicated below, we have historically not paid cash, equity or other compensation to any of our directors who are also our employees for service on our board of directors, nor have we paid cash or equity compensation to our non-employee directors, and no such compensation was paid to any of our directors in the year ended December 31, 2020. We have reimbursed, and will continue to reimburse, all of our directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our board of directors and committees of our board of directors. Kevin R. Lind, our President and Chief Executive Officer, is also a director but did not receive any additional compensation for his service as a director. See the section entitled "Executive Compensation" for more information regarding the compensation earned by Mr. Lind.

In December 2020, we granted Mr. Schneider and Mr. Sekhri each an option to purchase 25,461 shares of common stock. The option grants each have an exercise price of $3.62 per share and each vests in 24 equal monthly installments, subject to Mr. Schneider and Mr. Sekhri as applicable, remaining in service with us as of each monthly vesting date. In addition, we agreed to pay each of Mr. Schneider and Mr. Sekhri annual cash compensation of $25,000, payable quarterly, as compensation for their services to our board of directors.

Our board of directors adopted a non-employee director compensation policy in February 2021 that will become effective upon the execution and delivery of the underwriting agreement related to this offering and will be applicable to all of our non-employee directors. This compensation policy provides that eligible non-employee directors, as determined by our board of directors, will receive the following compensation for service on our board of directors:

- an annual cash retainer of $40,000 for all non-employee directors;
- an additional annual cash retainer of $30,000 for the chair of our board of directors;
- an additional annual cash retainer of $10,000, $7,500 and $5,000 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 $10,000, $7,500 and $5,000 for service as chair of the audit committee, compensation committee and the nominating and corporate governance committee, respectively;
- an initial option grant to purchase 12,367 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 12,367 shares of our common stock on the date of each of our annual stockholder meetings.

Non-employee directors who join our board of directors within 30 days prior to the effectiveness of this registration statement will receive an initial option grant and a prorated annual option grant in connection with this offering. The initial option grants will vest over a three year period and the annual option grants will vest over a one year period, subject to the director's continued service and acceleration in the full upon change in control or such director's death or disability.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2020, consisting of our former Chief Executive Officer, our principal executive officer and the next most highly compensated executive officer, were:

- Amit D. Munshi, our former Chief Executive Officer;
- Kevin R. Lind, our Chief Executive Officer and President; and
- Philip Perera, M.D., our Chief Medical Officer.

There were no other executive officers serving our company at December 31, 2020. In January 2021, we hired Ms. Roberts as our Chief Financial Officer. Although Ms. Roberts commenced services with us in 2021, we have included information in the following narrative regarding her compensation.

Summary Compensation Table

The following table presents all of the compensation awarded to or earned by or paid to our named executive officers for the fiscal year ended December 31, 2020.

Name and Principal Position	Salary ($)	Bonus ($)	Stock Awards ($)[6]	Option Awards ($)[6]	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)[7]	Total ($)
Amit D. Munshi *Former Chief Executive Officer*[1]	—	—	—	—	—	—	—
Kevin R. Lind *President and Chief Executive Officer*[2]	332,090[4]	165,506	1,087,164	692,608		9,323	2,286,691
Philip Perera, M.D. *Chief Medical Officer*[3]	103,683[5]	11,205[8]	—	482,982	—	—	597,870

(1) Mr. Munshi served as our Chief Executive Officer from January 2020 until February 2020 and did not receive any salary or other compensation for his service to us.

(2) Mr. Lind has served as our President and Chief Executive Officer since March 2020 and previously served as our Chief Financial Officer from January 2020 to January 2021. Mr. Lind also previously served as Arena's Executive Vice President and Chief Financial Officer until March 2020 and remained an employee of Arena until October 2020. Since March 2020, Mr. Lind has spent nearly 100% of his working time at our company. Mr. Lind did not receive any salary or other compensation for his service to us prior to March 2020 when he resigned as Arena's Executive Vice President and Chief Financial Officer. The compensation in the table above includes compensation for Mr. Lind's services provided solely to our company during 2020, including amounts paid by Arena for such services. Mr. Lind and Arena entered into a separation agreement in October 2020 in connection with his separation from Arena, which is summarized in Note 10 to our financial statements included elsewhere in this prospectus. The compensation in the table above does not include the amounts recorded on our financial statements for the fiscal year ended December 31, 2020 related to this agreement.

(3) Dr. Perera has served as our Chief Medical Officer since November 2020. Dr. Perera previously provided services to us as a Pharmaceutical Clinical Development Consultant from May 2020 to October 2020.

(4) The amounts disclosed represent (i) $257,766 paid by Arena for services rendered solely to us from March 2020 to October 2020 and (ii) $74,324 paid by us to Mr. Lind from October 2020 to December 2020.

(5) The amounts disclosed represent (i) $63,875 paid by us for services rendered to us as a Pharmaceutical Clinical Development Consultant from May 2020 to October 2020 and (ii) $39,808 paid by us for services as our Chief Medical Officer from November 2020 to December 2020.

(6) In accordance with SEC rules, these columns reflect the aggregate grant date fair value of the restricted stock awards and stock option awards granted during 2020. This amount has been computed in accordance with Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC) Topic 718. Assumptions used in the calculation of this amount are described in Note 2 to our financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that will be realized by Mr. Lind or Dr. Perera upon the vesting of the stock awards or stock options, the exercise of the stock options, or the sale of the common stock underlying such awards.
(7) The amounts reported in this column represent 401(k) matching contributions group-term life insurance premiums.
(8) In connection with his commencement of employment, Dr. Perera received a one-time sign on bonus, which was paid in 2020.

Narrative to the Summary Compensation Table

Annual Base Salary

Our named executive officers receive a base salary to compensate them for services rendered to us. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. None of our named executive officers is currently party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary. The 2020 annual base salaries for our named executive officers were as follows: (i) for Mr. Lind, $432,847 for services rendered to us from March 2020 through October 2020 and $440,000 for services to us commencing in October 2020, and (ii) for Dr. Perera, $345,000 for his services to us commencing in November 2020. Dr. Perera also received $63,875 for his services to us as a Pharmaceutical Clinical Development Consultant from May 2020 to October 2020. Mr. Munshi did not receive a base salary for his service as our Chief Executive Officer in 2020.

In February 2021, our board of directors approved increasing the base salaries of Mr. Lind, Dr. Perera, and Ms. Roberts. Effective upon effectiveness of the registration statement of which this prospectus forms a part, the annual base salaries for Mr. Lind, Dr. Perera and Ms. Roberts will be $550,000, $425,000 and $400,000, respectively.

Performance Bonus

For 2020, Mr. Lind was eligible for a performance bonus for services to us, in a target amount equal to $165,506, which reflects (i) 50% of Mr. Lind's base salary for services rendered to us from March 2020 through October 2020 while he remained an Arena employee (determined pursuant to goals under the Arena 2018 LTIP for 2020) and (ii) a pro-rated annual target annual bonus of $180,000 for services rendered to us for the remainder of 2020 based on our corporate objectives. In March 2021, Mr. Lind was awarded a performance bonus of $165,506 for his services rendered to us in 2020.

In February 2021, our board of directors approved increasing target amounts of the performance bonuses of Mr. Lind, Dr. Perera, and Ms. Roberts. Effective upon effectiveness of the registration statement of which this prospectus forms a part, the bonus targets amount for Mr. Lind, Dr. Perera and Ms. Roberts will be 60%, 40% and 40%, of their base salaries respectively.

Equity Compensation

Prior to this offering, we granted stock options to each of our named executive officers pursuant to our 2020 Plan, the terms of which are described below under "Equity Incentive Plans—2020 Equity Incentive Plan."

In October 2020, we granted Mr. Lind an option to purchase 348,450 shares of our common stock at an exercise price of $3.12 per share that vests as follows: one-twenty-fourth of the total shares vest monthly commencing on October 27, 2022, subject to Mr. Lind's continued service to us. The option includes an early exercise feature.

In October 2020, we granted Mr. Lind 348,450 shares of our restricted common stock at a fair market value of $3.12 per share that vest as follows: one-half of the shares vest on October 27, 2021 and one-twenty-fourth of the shares vest monthly commencing on October 27, 2021, subject to Mr. Lind's continued service to us.

In November 2020, we granted Dr. Perera an option to purchase 209,070 shares of our common stock at an exercise price of $3.62 per share that vests as follows: one-fourth of the total shares vest on October 27, 2021 and one-forty-eighth of the total shares shall vest monthly commencing on October 27, 2021, subject to Dr. Perera's continued service to us.

Outstanding Equity Awards as of December 31, 2020

The following table presents estimated information regarding outstanding equity awards held by our named executive officers as of December 31, 2020. See the section entitled "—Equity Incentive Plans—2020 Incentive Plan" below for additional information.

	Option Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price[4]	Option Expiration Date	Number of Shares of Stock that Have Not Vested	Market Value of Shares that Have Not Vested
Amit D. Munshi[1]	—	—	—	—	—	—
Kevin R. Lind	348,450[2]	—	$ 3.12	10/27/2030	348,450[5]	1,087,164[6]
Philip Perera, M.D.	—	209,070[3]	$ 3.62	11/22/2030	—	—

(1) Mr. Munshi served as our Chief Executive Officer from January 2020 until February 2020 and did not receive any salary or other compensation for his service.

(2) The amounts reported in this column represent an option to purchase 348,450 shares of our common stock by us to Mr. Lind in October 2020, which is early exercisable. One-twenty-fourth of the total shares vest monthly commencing on October 27, 2022, subject to Mr. Lind's continued service to us. The option includes an early exercise feature.

(3) The amounts reported in this column represent an option to purchase 209,070 shares of our common stock by us to Dr. Perera in November 2020. One-fourth of the total shares shall vest on October 27, 2020 and one-forty-eighth of the total shares shall vest monthly commencing on October 27, 2021, subject to Dr. Perera's continued service to us.

(4) All of the option awards were granted with a per share exercise price equal to the fair market value of one share of our common stock on the date of grant, as determined in good faith by our board of directors.

(5) The amounts reported in this column represent 348,450 shares of restricted common stock granted by us to Mr. Lind in October 2020. One-half of the shares vest on October 27, 2021 and one-twenty-fourth of the shares vest monthly commencing on October 27, 2021, subject to Mr. Lind's continued service to us.

(6) This amount reflects the fair market value of our common stock of $3.12 per share as of October 27, 2020 (the determination of the fair market value by our board of directors as of the most proximate date) multiplied by the amount shown in the column for the number of shares that have not vested.

Other Compensation

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, 2020, nor did our named executive officers participate in, or earn any benefits under, a non-qualified deferred compensation plan sponsored by us during the fiscal year ended December 31, 2020. Mr. Lind participated in Arena's employee 401(k) salary deferral plan during 2020 during the time he served as an employee of Arena which included a matching contribution by our company until October 26, 2020. We plan to establish a 401(k) plan for our employees in 2021. Our named executive officers would be eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan would be intended to qualify as a tax-qualified plan under Section 401(k) of the Code.

We generally do not provide our named executive officers with significant perquisites or other personal benefits.

Employment Agreements

Below are descriptions of our offer letters with our named executive officers, including 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. We did not enter into an employment arrangement with Mr. Munshi for his services as our Chief Executive Officer in 2020. Each of our named executive officers and Ms. Roberts is employed "at will".

Mr. Lind. We entered into an offer letter with Mr. Lind in October 2020, which was amended and restated effective as of the date of the underwriting agreement for this offering, and which governs the current terms of his employment with us. Pursuant to the agreement, Mr. Lind is entitled to an annual base salary of $550,000, a target annual discretionary bonus with a target amount of 60% of his annual base salary, as determined by our board of directors. Mr. Lind is also entitled to certain severance benefits upon a termination of his employment without "cause" or resignation for "good reason" (each as defined below and collectively, an Involuntary Termination), including (i) continued payment of Mr. Lind's base salary for eighteen months, (ii) payment of a pro-rata portion of his annual bonus for the year in which such Involuntary Termination occurs, based on actual performance results for such year as determined by the board of directors or the compensation committee of the board of directors (the Pro-Rata Bonus), (iii) payment of premiums for continued group health benefits for up to twelve months, and (iv) twelve months of accelerated vesting of all outstanding equity awards that are subject to time-based vesting, measured from the date of termination. If such termination or resignation occurs within three months preceding or 18 months immediately following a change in control (as defined in our 2021 Plan), then Mr. Lind would instead be eligible to receive (i) an amount equal to 150% of his base salary plus 150% of his target annual bonus for the year such Involuntary Termination occurs, (ii) payment of his Pro-Rata Bonus for the year in which the Involuntary Termination occurs, and (iii) payment of premiums for continued group health benefits for up to eighteen months, and the vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering our common stock will accelerate in full effective as of the later of (x) Mr. Lind's Involuntary Termination date or (y) the effective date of a the change in control.

For the purposes of Mr. Lind's offer letter, "cause" for termination means (A) Mr. Lind has been convicted of, or plead guilty or no contendere to, a felony or crime involving fraud, dishonesty or moral turpitude; (B) Mr. Lind has participated in any fraud against us; (C) Mr. Lind has materially and intentionally damaged company property; (D) Mr. Lind has willfully engaged in misconduct or has violated company policies in a manner that has been materially harmful to company; (E) Mr. Lind materially breached his offer letter, confidentiality agreement or any other agreement with us; or (F) Mr. Lind has participated in conduct that our board of directors in good faith and after reasonable determination has decided demonstrates that he is grossly unfit to serve.

For the purposes of Mr. Lind's offer letter, "good reason" means (A) a material reduction in base salary; (B) any material diminution in the authority, duty or responsibilities of Mr. Lind; or (C) an office relocation farther than 50 miles from our principal executive offices.

Mr. Lind and Arena entered into a separation agreement in October 2020 in connection with his separation from Arena, which is summarized in Note 10 to our financial statements included elsewhere in this prospectus. The separation agreement provided for certain treatment of outstanding equity awards covering Arena common stock that were granted to Mr. Lind by Arena prior to 2020 in respect of Mr. Lind's services to Arena and for Mr. Lind's continued eligibility to earn a performance bonus for 2020 with respect to the period of time Mr. Lind remained an employee of Arena in 2020.

Dr. Perera. We entered into an offer letter with Dr. Perera in November 2020, which was amended and restated effective as of the date of the underwriting agreement for this offering, and which governs the current terms of his employment with us. Pursuant to the agreement, Dr. Perera is entitled to an annual base salary of $425,000 and a target annual discretionary bonus, beginning with calendar year 2021, equal to 40% of his annual base salary. Dr. Perera is also entitled to certain severance benefits upon a termination of his employment without "cause" or resignation for "good reason" (each as defined below and collectively, an Involuntary Termination), including (i) continued payment of Dr. Perera's base salary for twelve months, (ii) payment of a pro-rata portion of his annual bonus for the year in which such Involuntary Termination occurs, based on actual performance results for such year as determined by the board of directors or the compensation committee of the board of directors (the Pro-Rata Bonus), (iii) six months of accelerated vesting of all outstanding equity awards that are subject to time-based vesting, measured from the date of termination and (iv) payment of premiums for continued group health benefits for up to twelve months. If such termination or resignation occurs within three months preceding or 18 months immediately following a change in control (as defined in our 2021 Plan), then Dr. Perera would instead be eligible to receive (i) an amount equal to 100% of his base salary plus 100% of his target annual bonus for the year such Involuntary Termination occurs, (ii) payment of his Pro-Rata Bonus for the year in which the Involuntary Termination occurs, and (iii) payment of premiums for continued group health benefits for up to twelve months, and the vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering our common stock will accelerate in full effective as of the later of (x) Dr. Perera's Involuntary Termination date or (y) the effective date of a the change in control. Prior to his employment with us, Dr. Perera provided consulting services to us from May 2020 to October 2020 pursuant to a consulting agreement that provided for consulting fees of $300 per hour (for services provided in May) and $10,000 per month (for services provided from June through October).

For the purposes of Dr. Perera's offer letter, "cause" for termination means (A) Dr. Perera has been convicted of, or plead guilty or no contendere to, a felony or crime involving fraud, dishonesty or moral turpitude; (B) Dr. Perera has participated in any fraud against us; (C) Dr. Perera has materially and intentionally damaged company property; (D) Dr. Perera has willfully engaged in misconduct or has violated company policies in a manner that has been materially harmful to company; (E) Dr. Perera materially breached his offer letter, confidentiality agreement or any other agreement with us; or (F) Dr. Perera has participated in conduct that we, in good faith and after reasonable determination, have decided demonstrates that he is grossly unfit to serve.

For the purposes of Dr. Perera's offer letter, "good reason" means (A) a material reduction in base salary; (B) any material diminution in the authority, duty or responsibilities of Dr. Perera with respect to our business; or (C) an office relocation farther than 50 miles from our principal executive offices.

Ms. Roberts. We entered into an offer letter with Ms. Roberts in January 2021, which was amended and restated effective as of the date of the underwriting agreement for this offering, and which governs the current terms of her employment with us. Pursuant to the agreement, Ms. Roberts is entitled to an annual base salary of $400,000 and a target annual discretionary bonus, beginning with calendar year 2021, equal to 40% of her annual base salary. We also paid Ms. Roberts a one-time lump sum cash sign-on bonus of $30,000. Ms. Roberts is also entitled to certain severance benefits upon a termination of her employment without "cause" or resignation for "good reason" (each as defined below and collectively, an Involuntary Termination), including (i) continued payment of Ms. Roberts' base salary for twelve months, (ii) payment of a pro-rata portion of her annual bonus for the year in which such Involuntary Termination occurs, based on actual performance results for such year as determined by the board of directors or the compensation committee of the board of directors (the Pro-Rata Bonus), (iii) six months of accelerated vesting of all outstanding equity awards that are subject to time-based vesting, measured from the date of termination and (iv) payment of premiums for continued group health benefits up to twelve months. If such termination or resignation occurs within three months preceding or 18 months immediately following a change in control (as defined in our 2021 Plan), then Ms. Roberts would instead be eligible to receive (i) an amount equal to 100% of her base salary plus 100% of her target annual bonus for the year such Involuntary Termination occurs, (ii) payment of her Pro-Rata Bonus for the year in which the Involuntary Termination occurs, and (iii) payment of premiums for continued group health benefits for up to

twelve months, and the vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering our common stock will accelerate in full effective as of the later of (x) Ms. Roberts' Involuntary Termination date or (y) the effective date of a the change in control.

For the purposes of Ms. Roberts' offer letter, "cause" for termination means (A) Ms. Roberts has been convicted of, or plead guilty or no contendere to, a felony or crime involving fraud, dishonesty or moral turpitude; (B) Ms. Roberts has participated in any fraud against us; (C) Ms. Roberts has materially and intentionally damaged company property; (D) Ms. Roberts has willfully engaged in misconduct or has violated company policies in a manner that has been materially harmful to company; (E) Ms. Roberts materially breached her offer letter, confidentiality agreement or any other agreement with us; or (F) Ms. Roberts has participated in conduct that we, in good faith and after reasonable determination, have decided demonstrates that she is grossly unfit to serve.

For the purposes of Ms. Roberts' offer letter, "good reason" means (A) a material reduction in base salary; (B) any material diminution in the authority, duty or responsibilities of Ms. Roberts with respect to our business; or (C) an office relocation farther than 50 miles from our principal executive offices.

Equity Incentive Plans

Prior to our Series A preferred stock financing in October 2020, we did not have our own equity incentive plan. One of our employees, Mr. Lind, was granted options under the Arena 2017 LTIP, which was granted at the time he served as Arena's Executive Vice President and Chief Financial Officer and represented compensation for his services to Arena. 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 is a part.

Performance Bonus Plan

Our board of directors adopted a formal executive bonus plan (Performance Bonus Plan) in February 2021. The purpose of the Performance Bonus Plan is to create a direct relationship between key business performance measurements and individual bonus amounts. The Performance Bonus Plan will provide for bonus payments to each executive officer conditioned upon the achievement of certain performance goals established by the compensation committee, which may differ for each executive officer. Our compensation committee will establish such performance goals based on one or more established performance criteria relating to financial, operational, workforce, or partner performance.

2021 Equity Incentive Plan

Our board of directors adopted our 2021 Plan in February 2021 and our stockholders approved our 2021 Plan in March 2021. Our 2021 Plan is a successor to and continuation of our 2020 Plan (as described below). Our 2021 Plan will become effective upon the execution and delivery of the underwriting agreement for this offering. The 2021 Plan came into existence upon its adoption by our board of directors, but no grants will be made under the 2021 Plan prior to its effectiveness. Once the 2021 Plan is effective, no further grants will be made under the 2020 Plan.

Awards. Our 2021 Plan provides for the grant of incentive stock options (ISOs) within the meaning of Section 422 of the Code to employees, including employees of any parent or subsidiary, and for the grant of nonstatutory stock options (NSOs) stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of awards to employees, directors and consultants, including employees and consultants of our affiliates.

Authorized shares. Initially, the maximum number of shares of our common stock that may be issued under our 2021 Plan after it becomes effective will not exceed 2,834,232 shares of our common stock, which is the sum of (A) 1,766,699 new shares (which includes the shares remaining available for grant under our 2020 Plan at the time the 2021 Plan becomes effective), plus (B) 1,067,533 shares of our common stock subject to outstanding stock options or other stock awards granted under our 2020 Plan that, on or after the 2021 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, if any, as such shares become available from time to time. In addition, the number of shares of our common stock reserved for issuance under our 2021 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2022 (assuming the 2021 Plan becomes effective in 2021) through January 1, 2031, in an amount equal to (i) 5% of the total number of shares of our common stock outstanding on December 31 of the fiscal year before the date of each automatic increase (determined on an as-converted to voting common stock basis, without regard to any limitations on the conversion of the non-voting common stock), or (ii) a lesser number of shares determined by our board of directors prior to the applicable January 1. The maximum number of shares of our common stock that may be issued on the exercise of ISOs under our 2021 Plan is 8,833,495 shares.

Shares subject to stock awards granted under our 2021 Plan that expire or terminate without being exercised in full or that are paid out in cash rather than in shares do not reduce the number of shares available for issuance under our 2021 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 do not reduce the number of shares available for issuance under our 2021 Plan. If any shares of our common stock issued pursuant to a stock award are forfeited back to or repurchased or reacquired by us (1) because of a failure to meet a contingency or condition required for the vesting of such shares, (2) to satisfy the exercise, strike or purchase price of an award or (3) to satisfy a tax withholding obligation in connection with an award, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under the 2021 Plan. Any shares previously issued which are reacquired in satisfaction of tax withholding obligations or as consideration for the exercise or purchase price of a stock award will again become available for issuance under the 2021 Plan.

Plan administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2021 Plan and is referred to as the “plan administrator” herein. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified stock awards and (2) determine the number of shares subject to such stock awards. Under our 2021 Plan, our board of directors has the authority to determine award recipients, grant dates, the numbers and types of stock awards to be granted, the applicable fair market value, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award.

The plan administrator has the power to modify outstanding awards under our 2021 Plan. Subject to the terms of our 2021 Plan, the plan administrator has the authority to reprice any outstanding stock award, cancel and re-grant any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2021 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2021 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2021 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 approved by the plan administrator, 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 plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, or (5) other legal consideration approved by the plan administrator.

Unless the plan 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 plan 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 (1) 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 (2) 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 plan 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 plan 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 approved by the plan administrator, 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 plan 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 plan administrator determines 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 plan administrator. The plan administrator determines the purchase price or strike price for a stock

appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2021 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator. Stock appreciation rights may be settled in cash or shares of common stock or in any other form of payment as determined by the Board and specified in the stock appreciation right agreement.

The plan administrator determines the term of stock appreciation rights granted under the 2021 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 immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance awards. The 2021 Plan permits 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, the common stock.

The performance goals may be based on any measure of performance selected by the 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 the board of directors at the time the performance award is granted, the board will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any portion of our business which is divested achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) 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; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other stock awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan 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 that commences after the 2021 Plan becomes effective, including awards granted and cash fees paid by us to such non-employee director, will not exceed $750,000 in total value; provided that such amount will increase to $1,500,000 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 (1) the class and maximum number of shares reserved for issuance under the 2021 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued on the exercise of ISOs, and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate transactions. The following applies to stock awards under the 2021 Plan in the event of a corporate transaction (as defined in the 2021 Plan), 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 plan administrator at the time of grant.

In the event of a corporate transaction, any stock awards outstanding under the 2021 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 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 plan 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 per share amount payable to holders of common stock in connection with the corporate transaction, 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 common stock.

Change in control. Awards granted under the 2021 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control (as defined in the 2021 Plan) 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.

Plan amendment or termination. Our board of directors has the authority to amend, suspend, or terminate our 2021 Plan, 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 2021 Plan. No stock awards may be granted under our 2021 Plan while it is suspended or after it is terminated.

2020 Equity Incentive Plan

Our board of directors and stockholders adopted our 2020 Equity Incentive Plan (2020 Plan) in October 2020. As of December 31, 2020, there were 1,147,746 shares remaining available for the future grant of stock awards under our 2020 Plan. As of December 31, 2020, there were six outstanding stock options covering a total of 873,264 shares of our common stock, with a weighted-average exercise price of $3.42 per share, and one

restricted stock award covering 348,450 shares of our common stock that were granted under our 2020 Plan. Any shares of common stock remaining available for issuance under the 2020 Plan upon the 2021 Plan's effectiveness in connection with this offering will become available for issuance under the 2021 Plan.

Stock awards. Our 2020 Plan provides for the grant of ISOs within the meaning of Section 422 of the Code to employees, including employees of any parent or subsidiary, and for the grant of NSOs, stock appreciation rights, restricted stock, restricted stock units and other forms of stock awards to employees, directors and consultants, including employees and consultants of our affiliates. To date, we have only granted stock options under the 2020 Plan.

Authorized shares. Subject to certain capitalization adjustments, the aggregate number of shares of common stock that may be issued pursuant to stock awards under the 2020 Plan will not exceed 2,369,460 shares. The maximum number of shares of our common stock that may be issued pursuant to the exercise of ISOs under our 2020 Plan is 7,108,380 shares.

Shares subject to stock awards granted under our 2020 Plan that expire or otherwise terminate without being exercised in full or that are settled in cash rather than in shares do not reduce or otherwise offset the number of shares available for issuance under our 2020 Plan (or, following its effectiveness, the 2020 Plan). Additionally, if any shares issued pursuant to a stock award are forfeited back to or repurchased for any reason, including because of the failure to meet a contingency or condition required to vest, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the 2020 Plan (or, following its effectiveness, the 2021 Plan). This includes shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award.

Plan administration. Our board of directors, or a duly authorized committee of our board of directors to which the board delegates its administrative authority, will administer our 2020 Plan and is referred to as the "plan administrator" herein. The plan administrator may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified options and stock appreciation rights (and to the extent permitted by applicable law, other stock awards) and (2) determine the number of shares subject to such stock awards; provided, however, that the board resolutions regarding such delegation must specify the total number of shares that may be subject to awards granted by such officer, and provided further, that no officer may grant an award under the 2020 Plan to himself or herself. Under our 2020 Plan, the plan administrator has the authority to, among other things, determine award recipients, dates of grant, the numbers and types of stock awards to be granted, the applicable fair market value and the provisions of each stock award, including the period of their exercisability and the vesting schedule applicable to a stock award, to construe and interpret the 2020 Plan and awards granted thereunder (and to establish, amend and revoke any rules and regulations for the administration of the 2020 Plan and any such awards), or to accelerate awards.

Under the 2020 Plan, the plan administrator also generally has the authority to effect, with the consent of any adversely affected participant, (A) the reduction of the exercise, purchase, or strike price of any outstanding award; (B) the cancellation of any outstanding award and the grant in substitution therefor of other stock awards, cash, or other consideration; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2020 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant (or 110% of the fair market value for certain major stockholders). Options granted under the 2020 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2020 Plan, up to a maximum of 10 years (or five years, for certain major stockholders). 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 up to 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 or our insider trading policy.

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 up to 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 up to 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 plan administrator and may include (1) cash, check, bank draft, electronic funds transfer or money order payable to us, (2) subject to company and/or Board consent and provided that at the time of exercise the common stock is publicly traded, a broker-assisted cashless exercise, (3) subject to company and/or Board consent and provided that at the time of exercise the common stock is publicly traded, the tender of shares of our common stock previously owned by the optionholder, (4) subject to company and/or Board consent at the time of exercise, a net exercise of the option if it is an NSO, (5) a deferred payment arrangement, or (6) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator or a duly authorized officer in each case, (i) an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument and (ii) an optionholder may designate a beneficiary who may exercise the option following the optionholder's death.

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 optionholder 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 affiliates unless (1) 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 (2) the term of the ISO does not exceed five years from the date of grant.

Changes to capital structure. In the event of a "capitalization adjustment," the board of directors, in its discretion, will make appropriate and proportionate adjustments to (1) the class and maximum number of shares reserved for issuance under the 2020 Plan, (2) the class and maximum number of shares that may be issued on the exercise of ISOs, and (3) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards. For purposes of the 2020 Plan, "capitalization adjustment" generally means any change that is made in (or other events occurring with respect to) our common stock subject to the 2020 Plan or any award without the receipt of consideration by us through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large non-recurring cash dividend, stock split, reverse stock split, liquidating dividend, combination or exchange of shares, change in corporate structure, or other similar equity restructuring transaction (within the meaning of Statement of Financial Accounting Standards Board ASC Topic 718).

Corporate transactions. Our 2020 Plan provides that in the event of a "corporate transaction," unless otherwise provided in an award agreement or other written agreement between us and the award holder, the plan administrator may take one or more of the following actions with respect to such stock awards:

- arrange for the assumption, continuation, or substitution of a stock award by a surviving or acquiring corporation;

- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring corporation;
- accelerate the vesting, in whole or in part, of the stock award and provide for its termination if not exercised (if applicable) at or before the effective time of the transaction;
- arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us;
- cancel or arrange for the cancellation of the stock award, to the extent not vested or not exercised before the effective time of the transaction, in exchange for such cash consideration (including no consideration) as our board of directors, in its sole discretion, may consider appropriate; and
- make a payment equal to the excess, if any, of (A) the value of the property the participant would have received on exercise of the award immediately before the effective time of the transaction, over (B) any exercise price payable by the participant in connection with the exercise.

The plan administrator is not obligated to treat all stock awards or portions of stock awards in the same manner and is not obligated to treat all participants in the same manner.

Under the 2020 Plan, a "corporate transaction" is generally defined as the consummation, in a single transaction or in a series of related transactions, of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, or (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

Change in control. A stock award may be subject to additional acceleration of vesting and exercisability upon or after a change in control as may be provided in an applicable award agreement or other written agreement, but in the absence of such provision, no such acceleration will occur. We have a form of option grant agreement outstanding that provides for full acceleration of vesting in the event of either a termination without cause or a resignation for good reason upon or within 3 months prior to, or 12 months after, the effective time of a change in control. Under the 2020 Plan, a "change in control" is generally defined as (1) certain acquisitions by a person or company of more than 50% of the combined voting power of our then outstanding stock, (2) 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, or (3) a sale, lease, exclusive license or other disposition of all or substantially all of our consolidated 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.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2020 Plan, provided that such action does not impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. Unless terminated sooner, the 2020 Plan will automatically terminate on October 26, 2030. No stock awards may be granted under our 2020 Plan while it is suspended or after it is terminated. Once the 2021 Plan is effective, no further grants will be made under the 2020 Plan.

2021 Employee Stock Purchase Plan

Our board of directors adopted our 2021 Employee Stock Purchase Plan (ESPP) in February 2021 and our stockholders approved our ESPP in March 2021. The ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of the ESPP is 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. The ESPP includes two components. One component is 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. In addition, purchase rights may be granted under a component that does not qualify for such favorable tax treatment because of deviations necessary to permit participation by eligible employees who are foreign nationals or employed outside of the United States while complying with applicable foreign laws.

Share reserve. Following this offering, the ESPP authorizes the issuance of 353,339 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 January 1 of each calendar year, beginning on January 1, 2022 (assuming the ESPP becomes effective in 2021) through January 1, 2031, by the lesser of (i) 1% of the total number of shares of our common stock outstanding on the last day of the fiscal year before the date of the automatic increase (determining on an as-converted to voting common stock basis, without regard to any limitations on the conversion of the non-voting common stock); and (ii) such number of shares of common stock that would cause the aggregate number of shares of common stock then reserved for issuance under the ESPP to equal 1,060,017 shares; provided that before the date of any such increase, our board of directors may determine that such increase will be for a lesser amount of shares. As of the date hereof, no shares of our common stock have been purchased under the ESPP.

Administration. Our board of directors administers the ESPP and may delegate its authority to administer the ESPP to our compensation committee. The ESPP is 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 the ESPP, we may specify offerings with durations of not more than 27 months, and may 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. An offering under the ESPP 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, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share that is at least the lesser of (1) 85% of the fair market value of a share of our common stock on the first date of an offering, or (2) 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 the ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week, (2) being customarily employed for more than five months per calendar year, or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the 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 the 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. In the event that 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, the board of directors will make appropriate adjustments to: (1) the class(es) and maximum number of shares reserved under the ESPP, (2) the class(es) and maximum number of shares by which the share reserve may increase automatically each year, (3) the class(es) and number of shares subject to and purchase price applicable to outstanding offerings and purchase rights, and (4) the class(es) and number of shares that are subject to purchase limits under ongoing offerings.

Corporate transactions. In the event of certain significant corporate transactions, any then-outstanding rights to purchase our stock under the 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 the ESPP, a corporate transaction is generally the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

ESPP amendment or termination. Our board of directors has the authority to amend or terminate our ESPP, provided that 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

On the closing of this offering, our amended and restated certificate of incorporation 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.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following includes a summary of transactions since January 3, 2020, the date of our incorporation, to which we have been a party in which the amount involved exceeded $120,000 or 1% of our total assets as of December 31, 2020, and in which any of our directors, director nominee, 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 "Executive Compensation." We also describe below certain other transactions with our directors, executive officers and stockholders.

Our Relationship with Arena Pharmaceuticals, Inc.

Prior to October 2020, we were a wholly-owned subsidiary of Arena. As of December 31, 2020, Arena held approximately 33.4% of our outstanding shares of common stock (on an as-converted basis). Immediately following the closing of this offering, Arena will own 23.5% of our outstanding shares of common stock and non-voting common stock (or approximately 22.5% of our common stock and non-voting common stock, if the underwriters exercise in full their option to purchase additional shares of our common stock in this offering), and as a result, Arena will continue to have significant influence over our business, including pursuant to the agreements described below. The agreements summarized below are filed as exhibits to the registration statement of which this prospectus is a part, and the summaries of these agreements set forth the terms of the agreements that we believe are material. These summaries are qualified in their entirety by reference to the full text of such agreements.

License Agreement

In October 2020, we entered into the Arena License Agreement, pursuant to which we obtained an exclusive, worldwide license of certain intellectual property owned by Arena. For a more detailed description of the Arena License Agreement, see "Business—License Agreement with Arena."

Royalty Purchase Agreement

In October 2020, we entered into a Royalty Purchase Agreement with Arena and 356 Royalty Inc., a wholly owned subsidiary of Arena (356 Royalty), pursuant to which we purchased the right to receive all milestone payments, royalties, interest, and other payments relating to net sales of lorcaserin in all countries and territories of the world (Territory), owed or otherwise payable to 356 Royalty by Eisai, pursuant to a Transaction Agreement dated December 28, 2016, as amended (Transaction Agreement), by and among 356 Royalty and Eisai, for an upfront payment of approximately $121,000. Under the Transaction Agreement, the royalty rates, range from 9.5% on annual global net sales less than or equal to $175 million, 13.5% on annual global net sales greater than $175.0 million but less than or equal to $500.0 million and 18.5% on annual global net sales greater than $500 million. In addition, we purchased the right to receive a payment of $25.0 million, which will be payable upon the achievement of a sales milestone.

The Transaction Agreement will remain in effect until terminated by 356 Royalty or Eisai with respect to all countries in the Territory. Pursuant to the Royalty Purchase Agreement, Arena and 356 Royalty shall not terminate the Transaction Agreement without our prior written consent unless any such action would reasonably be expected to not have a significant adverse effect on the milestones and royalties payable under the Transaction Agreement.

Lorcaserin is currently in a Phase 3 clinical trial for Dravet syndrome.

Services Agreement

In October 2020, we entered into a Services Agreement with Arena under which Arena agreed to perform certain research and development services, general administrative services, management services and other mutually agreed services for us. For a more detailed description of the Services Agreement, see "Business—Services Agreement with Arena."

Series A Convertible Preferred Stock Financing

In October 2020, we entered into a Series A preferred stock purchase agreement with various investors, pursuant to which we sold and issued an aggregate of 5,600,000 shares of our Series A convertible preferred stock, (Series A preferred stock), at a purchase price of $10.00 per share, for aggregate gross proceeds of $56.0 million (Series A financing).

The following table summarizes purchases of shares of our Series A 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 A Convertible Preferred Stock Purchased	Aggregate Purchase Price
Zone II Healthcare Holdings, LLC	1,500,000	$ 15,000,000
Entities affiliated with Cormorant Private Healthcare Fund III, LP[2]	1,200,000	$ 12,000,000
Entities affiliated with T. Rowe Price Associates, Inc.[3]	1,200,000	$ 12,000,000
HBM Healthcare Investments (Cayman) Ltd.[4]	1,000,000	$ 10,000,000
Arena Pharmaceuticals, Inc.[5]	100,000	$ 1,000,000

(1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the caption "Principal Stockholders."

(2) Consists of (i) 960,480 shares of Series A preferred stock purchased by Cormorant Private Healthcare Fund III, LP, (ii) 223,560 shares of Series A preferred stock purchased by Cormorant Global Healthcare Master Fund, LP and (iii) 15,960 shares of Series A preferred stock purchased by CRMA SPV, L.P.

(3) Consists of (i) 626,880 shares of Series A preferred stock purchased by T. Rowe New Horizons Fund Inc., (ii) 415,643 shares of Series A preferred stock purchased by T. Rowe Price Health Sciences Fund, Inc., (iii) 78,874 shares of Series A preferred stock purchased by T. Rowe Price New Horizons Trust, (iv) 29,190 shares of Series A preferred stock purchased by TD Mutual Funds—TD Health Sciences Fund, (v) 23,868 shares of Series A preferred stock purchased by VALIC Company I—Health Sciences Fund, (vi) 18,712 shares of Series A preferred stock purchased by T. Rowe Price Health Sciences Portfolio, (vii) 4,317 shares of Series A preferred stock purchased by T. Rowe Price U.S. Equities Trust and (viii) 2,516 shares of Series A preferred stock purchased by MassMutual Select Funds—MassMutual Select T. Rowe Price Small and Mid Cap Blend Fund.

(4) Chandra P. Leo, a former member of our board of directors, is an investment advisor to HBM Partners AG. HBM Partners AG acts as an investment advisor to HBM Healthcare Investments (Cayman) Ltd.

(5) Mr. Aurentz, a member of our board of directors, is employed at Arena Pharmaceuticals, Inc.

Investors' Rights Agreement

In October 2020, we entered into an Investors' Rights Agreement (Rights Agreement) with certain holders of our capital stock, including entities affiliated with Zone II Healthcare Holdings, LLC, Cormorant Private Healthcare Fund III, LP, T. Rowe Price Associates, Inc., HBM Healthcare Investments (Cayman) Ltd. and Arena Pharmaceuticals, Inc.

The Rights Agreement grants certain rights to the holders thereof, including certain registration rights with respect to the registrable securities held by them. See "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 $3.0 million of our Series A preferred stock (Major Holders) a right of first offer with respect to future sales of our equity, excluding the shares to be offered and sold in this offering and (ii) grant certain information and inspection rights to such Major Holders. Each of these obligations will terminate in connection with the closing of this offering.

Voting Agreement

In October 2020, we entered into a Voting Agreement (Voting Agreement) with certain holders of our capital stock, including entities affiliated with Zone II Healthcare Holdings, LLC, Cormorant Private Healthcare Fund III, LP, T. Rowe Price Associates, Inc., HBM Healthcare Investments (Cayman) Ltd. and Arena Pharmaceuticals, Inc., and including certain members of, and affiliates of, our directors.

Pursuant to the Voting Agreement, HBM Healthcare Investments (Cayman) Ltd. has the right to designate one member to be elected to our board of directors and Arena Pharmaceuticals, Inc. has the right to designate two members to be elected to our board of directors. See "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 October 2020, we entered into a Right of First Refusal and Co-Sale Agreement (Co-Sale Agreement) with certain holders of our capital stock, including entities affiliated with Zone II Healthcare Holdings, LLC, Cormorant Private Healthcare Fund III, LP, T. Rowe Price Associates, Inc., HBM Healthcare Investments (Cayman) Ltd. and Arena Pharmaceuticals, Inc., and including certain members of, and 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, including one of our executive officers and directors. To the extent we do not exercise such right in full, the holders of our convertible preferred stock 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.

Exchange Agreement

In March 2021, we entered into an exchange agreement with certain holders of our Series A preferred stock, including entities affiliated with Zone II Healthcare Holdings, LLC, Cormorant Private Healthcare Fund III, LP, and HBM Healthcare Investments (Cayman) Ltd. (Exchange Agreement), pursuant to which we agreed to issue, immediately prior to the closing of this offering, newly issued shares of our non-voting common stock in exchange for outstanding shares of our Series A preferred stock, in an amount such that shares held by such holder, including any shares purchased in this offering and shares of voting common stock issued upon conversion of Series A preferred stock, will result in such holder beneficially owning not more than 9.99% of our common stock as of immediately following the closing of this offering.

The shares of Series A preferred stock exchanged pursuant to the Exchange Agreement will cease to be issued and outstanding. The remaining outstanding shares of our Series A preferred stock will automatically convert into shares of our common stock on a 1.38-for-1 basis upon 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 "Executive Compensation —Limitations on Liability and Indemnification Matters."

Policies and Procedures for Transactions with Related Persons

We have adopted 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 or an affiliate 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 or an affiliate of any of the foregoing persons, in which the amount involved exceeds $120,000 (or, if less, 1% of the average of our total assets in a fiscal year) 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 that are comparable to the terms available to or from, as the case may be, unrelated third parties 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 December 31, 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 current directors;
- each our of named executive officers; and
- all of our named 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. 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 as of March 1, 2021, which is 60 days after December 31, 2020. These shares are deemed to be outstanding and beneficially owned by the person holding such options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. 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 11,916,990 shares of our common stock outstanding as of December 31, 2020, and assumes the automatic conversion of all 5,600,000 outstanding shares of our Series A preferred stock into 7,728,000 shares of our common stock upon the closing of this offering and does not give effect to the Exchange. Applicable percentage ownership after the offering is based on 13,287,590 shares of common stock outstanding immediately after the closing of this offering, and assumes (i) the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock pursuant to the Exchange Agreement, (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering, and (iii) the sale of 5,000,000 shares of common stock in this offering.

The percentage ownership information before and after the offering assumes no purchases of any shares of our common stock in this offering by any of the beneficial owners identified in the table below.

Unless otherwise indicated, the address for each beneficial owner listed in the table below is c/o Longboard Pharmaceuticals, Inc., 6154 Nancy Ridge Drive, San Diego, California 92121.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
Greater than 5% Holders:			
Arena Pharmaceuticals, Inc.(1)	3,978,540	33.4%	29.9%
Entities affiliated with Cormorant Asset Management, LP(2)	1,656,000	13.9	3.9
Entities affiliated with T. Rowe Price Associates, Inc.(3)	1,656,000	13.9	12.5
HBM Healthcare Investments (Cayman) Ltd.(4)	1,380,000	11.6	4.9
Zone II Healthcare Holdings, LLC(5)	2,070,000	17.4	2.3
Named Executive Officers and Directors:			
Amit D. Munshi	—	*	*
Kevin R. Lind(6)	696,900	5.8	5.2
Philip Perera, M.D.	—	*	*
Vincent E. Aurentz	—	*	*
Corinne Le Goff, Pharm.D.	—	*	*
Casey C. Lynch	—	*	*
Phillip M. Schneider(7)	2,121	*	*
Paul J. Sekhri(8)	2,121	*	*
All current executive officers and directors as a group (8 persons)(9)	701,142	5.8%	5.2%

* Represents beneficial ownership of less than 1%.

(1) Consists of (i) 3,840,540 shares of common stock held by Arena and (ii) 138,000 shares of common stock issuable upon conversion of our Series A preferred stock held by Arena. Mr. Munshi, our former President and Chief Executive Officer, and Mr. Aurentz, a member of our board of directors, are employed at Arena Pharmaceuticals, Inc.

(2) Consists of (i) 414,207 shares of common stock issuable upon conversion of our Series A preferred stock held by Cormorant Private Healthcare Fund III, LP (Cormorant Fund III), (ii) 96,410 shares of common stock issuable upon conversion of the Series A preferred stock held by Cormorant Global Healthcare Master Fund, LP (Cormorant Master Fund) and (iii) 6,883 shares of common stock issuable upon conversion of the Series A preferred stock held by CRMA SPV, L.P. (CRMA). Cormorant Global Healthcare GP, LLC (GlobalGP), is the general partner of Cormorant Master Fund, and Cormorant Private Healthcare III GP, LLC (Private GP III) is the general partner of Cormorant Fund III. Bihua Chen serves as the managing member of Global GP and Private GP III, and as the general partner of Cormorant Asset Management, LP (Cormorant). Cormorant serves as the investment manager to 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 III and CRMA. The address for each of the entities is 200 Clarendon Street, 52nd Floor, Boston Massachusetts 02116. Percentage ownership after the offering assumes the issuance of an aggregate of 1,138,500 shares of non-voting common stock in exchange for an aggregate of 825,000 shares of Series A preferred stock held by Cormorant Fund III, Cormorant Master Fund and CRMA.

(3) Consists of (i) 865,094 shares of common stock issuable upon conversion of our Series A preferred stock held by T. Rowe New Horizons Fund Inc., (ii) 573,587 shares of common stock issuable upon conversion of our Series A preferred stock held by T. Rowe Price Health Sciences Fund, Inc., (iii) 108,846 shares of common stock issuable upon conversion of our Series A preferred stock held by T. Rowe Price New Horizons Trust, (iv) 40,282 shares of common stock issuable upon conversion of our Series A preferred stock held by TD Mutual Funds – TD Health Sciences Fund, (v) 32,938 shares of common stock issuable upon conversion of our Series A preferred stock held by VALIC Company I—Health Sciences Fund, (vi) 25,823 shares of common stock issuable upon conversion of our Series A preferred stock held by T. Rowe Price Health Sciences Portfolio, (vii) 5,957 shares of common stock issuable upon conversion of our Series A preferred stock held by T. Rowe Price U.S. Equities Trust and (viii) 3,472 shares of common stock issuable upon conversion of our Series A preferred stock held by MassMutual Select Funds—MassMutual Select T. Rowe Price Small and Mid Cap Blend Fund. The foregoing accounts are advised or sub-advised by T. Rowe Price Associates, Inc. (T. Rowe Price) a registered investment adviser. T. Rowe Price serves as investment adviser or subadviser, as applicable, with power to direct investments and/or sole power to vote the securities owned by the

accounts (with the exception of one subadvisory fund that retains its own voting authority). Although T. Rowe Price may be deemed to be the beneficial owner of all the shares listed, T. Rowe Price expressly disclaims beneficial ownership of such securities. T. Rowe Price Investment Services, Inc. (TRPIS), a registered broker-dealer (and member of the Financial Industry Regulatory Authority, Inc.), is a subsidiary of T. Rowe Price, the investment adviser or subadviser, as applicable, to the accounts listed above. TRPIS was formed primarily for the limited purpose of acting as the principal underwriter and distributor of shares of the funds in the T. Rowe Price mutual fund family. TRPIS does not engage in underwriting or market-making activities involving individual securities. T. Rowe Price is the wholly owned subsidiary of T. Rowe Price Group, Inc., which is a publicly traded financial services holding company. The address of the entities affiliated with T. Rowe Price is 100 East Pratt Street, Baltimore, Maryland 21202.

(4) Consists of 648,600 shares of common stock issuable upon conversion of our Series A preferred stock held by HBM Healthcare Investments (Cayman) Ltd. The board of directors of HBM Healthcare Investments (Cayman) Ltd. has sole voting and investment power with respect to the shares held by such entity. The board of directors of HBM Healthcare Investments (Cayman) Ltd. is comprised of Jean-Marc Lesieur, Richard Coles, Sophia Harris, Dr. Andreas Wicki, Paul Woodhouse and Mark Kronenfeld, none of whom has individual voting or investment power with respect to such shares, and each disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The address of HBM Healthcare Investments (Cayman) Ltd. is Governors Square, Suite No. 4-212-2, 23 Lime Tree Bay Avenue West Bay Grand Cayman, Cayman Islands. Percentage ownership after the offering assumes the issuance of an aggregate of 731,400 shares of non-voting common stock in exchange for an aggregate of 530,000 shares of Series A preferred stock.

(5) Consists of 310,500 shares of common stock issuable upon conversion of our Series A preferred stock held by Zone II Healthcare Holdings, LLC (Zone II). Farallon Capital Management, L.L.C. (FCM), as the manager of Zone II, may be deemed to beneficially own such shares of common stock issuable to Zone II. Each of Philip D. Dreyfuss, Michael B. Fisch, Richard B. Fried, David T. Kim, Michael G. Linn, Rajiv A. Patel, Thomas G. Roberts, Jr., William Seybold, Andrew J.M. Spokes, John R. Warren and Mark D. Wehrly (Managing Members), as a senior managing member or managing member, as the case may be, of FCM, in each case with the power to exercise investment discretion, may be deemed to beneficially own such shares of common stock issuable to Zone II. Each of FCM and the Managing Members disclaims beneficial ownership of any such shares of common stock. The address of Zone II Healthcare Holdings, LLC is c/o Farallon Capital Management, L.L.C. One Maritime Plaza, Suite 2100, San Francisco, California 94111. Percentage ownership after the offering assumes the issuance of an aggregate of 1,759,500 shares of non-voting common stock in exchange for an aggregate of 1,275,000 shares of Series A preferred stock.

(6) Consists of (i) 348,450 shares of common stock held by Mr. Lind and (ii) 348,450 shares of common stock subject to options held by Mr. Lind that are exercisable within 60 days of December 31, 2020.

(7) Consists of 2,121 shares of common stock subject to options held by Mr. Schneider that are exercisable within 60 days of December 31, 2020.

(8) Consists of 2,121 shares of common stock subject to options held by Mr. Sekhri that are exercisable within 60 days of December 31, 2020.

(9) Consists of the shares described in notes 6, 7 and 8 above.

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 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, non-voting 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 300,000,000 shares of common stock, par value $0.0001 per share, 10,000,000 shares of non-voting common stock, par value $0.0001 per share, and 10,000,000 shares of preferred stock, par value $0.0001 per share. All of our authorized shares of preferred stock will be undesignated.

Pursuant to the Exchange Agreement, immediately prior to the closing of this offering, we will issue shares of our non-voting common stock in exchange for outstanding shares of our Series A preferred stock, in an amount such that shares held by each holder that is party to the Exchange Agreement, including any shares purchased in this offering and shares of voting common stock issued upon conversion of Series A preferred stock, will result in such holder beneficially owning not more than 9.99% of our common stock as of immediately following the closing of this offering. The shares of Series A preferred stock exchanged pursuant to the Exchange Agreement will cease to be issued and outstanding. The remaining outstanding shares of our Series A preferred stock will automatically convert into shares of our common stock on a 1.38-for-1 basis upon the closing of this offering.

As of December 31, 2020, assuming (i) the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock pursuant to the Exchange Agreement and (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering, there were 11,916,990 shares of common stock and non-voting common stock outstanding and held of record by 18 stockholders.

Common Stock and Non-Voting Common Stock

Holders of our common stock and our non-voting common stock have identical rights, provided that, (i) except as otherwise expressly provided in our amended and restated certificate of incorporation or as required by applicable law, on any matter that is submitted to a vote by our stockholders, holders of our common stock are entitled to one vote per share of common stock, and holders of our non-voting common stock are not entitled to any votes per share of non-voting common stock, including for the election of directors, and (ii) holders of our common stock have no conversion rights, while holders of our non-voting common stock shall have the right to convert each share of our non-voting common stock into one share of common stock at such holder's election, provided that as a result of such conversion, such holder, together with its affiliates and any members of a Schedule 13(d) group with such holder, would not beneficially own in excess of 9.99% of our common stock immediately prior to and following such conversion, unless otherwise as expressly provided for in our amended and restated certificate of incorporation. However, this ownership limitation may be increased or decreased to any other percentage (not to exceed 19.99%) designated by such holder of non-voting common stock upon 61 days' notice to us.

Voting Rights

The common stock is entitled to one vote per share on any matter that is submitted to a vote of our stockholders, and the non-voting common stock is not entitled to any votes per share. 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.

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 and non-voting 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 and non-voting 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 entitled "Dividend Policy" for further information.

Liquidation Rights. On our liquidation, dissolution, or winding-up, the holders of common stock and non-voting 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 and non-voting 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 and non-voting common stock to be issued under this offering will be fully paid and non-assessable.

Preferred Stock

As of December 31, 2020, there were 5,600,000 shares of our Series A preferred stock outstanding, held of record by 17 holders. Each outstanding share of our Series A preferred stock is entitled to convert into 1.38 shares of our common stock.

Pursuant to the Exchange Agreement, immediately prior to the closing of this offering, we will issue shares of our non-voting common stock in exchange for outstanding shares of our Series A preferred stock, in an amount such that shares held by each holder that is party to the Exchange Agreement, including any shares purchased in this offering and shares of voting common stock issued upon conversion of Series A preferred stock, will result in such holder beneficially owning not more than 9.99% of our common stock as of immediately following the closing of this offering. The shares of Series A preferred stock exchanged pursuant to the Exchange Agreement will cease to be issued and outstanding. The remaining outstanding shares of our Series A preferred stock will automatically convert into shares of our common stock on a 1.38-for-1 basis upon the closing of this offering.

In addition, upon the closing of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of Series A 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 10,000,000 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 and non-voting common stock, as applicable. 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 non-voting common stock and may adversely affect the market price of the common stock and non-voting common stock and the voting and other rights of the holders of common stock and non-voting common stock. We have no current plans to issue any shares of preferred stock.

Registration Rights

Our Rights Agreement provides that certain holders of our capital stock, including certain holders of at least 5% of our capital stock and entities affiliated with certain of our directors, shall have certain registration rights, as set forth below. The registration of shares of our common stock by the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We are obligated to pay the registration expenses, other than underwriting discounts and commissions, of the shares registered by 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, to limit the number of shares such holders may include. The demand, piggyback and Form S-3 registration rights described below will expire three years after the effective date of the registration statement, of which this prospectus is a part, or with respect to any particular stockholder, such time after the effective date of the registration statement that such stockholder can sell all of its shares under Rule 144 of the Securities Act without limitation in a single transaction without registration.

Demand Registration Rights

The holders of an aggregate of 7,728,000 shares of our common stock (including common stock issuable upon conversion of our non-voting common stock) are entitled to certain demand registration rights. At any time beginning 180 days after the closing of this offering, the holders of at least 40% 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. 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

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. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right to include their shares in the registration, subject to limitations that the underwriters may impose on the number of shares included in the offering.

Form S-3 Registration Rights

The holders of an aggregate of 7,728,000 shares of common stock (including common stock issuable upon conversion of our non-voting common stock) will be entitled to certain Form S-3 registration rights. Any holder 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 reasonably anticipated aggregate gross proceeds of the shares offered would equal or exceed $4.0 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.

Anti-Takeover Provisions of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the 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, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.
- Section 203 defines a “business combination” to include the following:
- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Among other things, our amended and restated certificate of incorporation and amended and restated bylaws will:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change in control;
- provide that the authorized number of directors may be changed only by resolution of our board of directors;
- provide that our board of directors will be classified into three classes of directors;
- provide that, subject to the rights of any series of preferred stock to elect directors, directors may only be removed for cause, which removal may be effected, subject to any limitation imposed by law, by the holders of at least 66 2/3% of the voting power of all of our then-outstanding shares of the capital stock entitled to vote generally at an election of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent or electronic transmission;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- provide that special meetings of our stockholders may be called only by the chairman of our board of directors, our chief executive officer or president or by our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors, and not by our stockholders; and
- not provide for cumulative voting rights, therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose.

The amendment of any of these provisions would require approval by the holders of at least 66 2/3% of the voting power of all of our then-outstanding common stock entitled to vote generally in the election of directors, voting together as a single class.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Because 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 intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers 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 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. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our amended and restated certificate of incorporation to be effective upon the closing of this offering will provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under state, statutory and common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

In addition, our amended and restated certificate of incorporation to be effective upon the closing of this offering will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Limitations on Liability and Indemnification

See “Executive Compensation—Limitations on Liability and Indemnification.”

Exchange Listing

We have applied to list our common stock on the Nasdaq Global Market under the symbol “LBPH.”

Transfer Agent and Registrar

On the closing of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company. The transfer agent and registrar’s address is 6201 15th Avenue, Brooklyn, New York 11219.

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 or upon the conversion of our non-voting common stock, 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 December 31, 2020, upon the closing of this offering, a total of 16,916,990 shares of common stock and non-voting common stock will be outstanding, assuming (i) the issuance of 3,629,400 shares of non-voting common stock in exchange for 2,630,000 shares of Series A preferred stock pursuant to the Exchange Agreement and (ii) the automatic conversion of 2,970,000 outstanding shares of our Series A preferred stock into 4,098,600 shares of our common stock upon the closing of this offering. 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.

The remaining shares of common stock and our non-voting 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 under the Securities Act. 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 and non-voting common stock then outstanding, which will equal approximately 169,169 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 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 2020 Plan, 2021 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 all of our common stock and securities exercisable for or convertible into our common stock (including shares of our non-voting 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 Citigroup Global Markets Inc., Evercore Group L.L.C., Guggenheim Securities, LLC and Cantor Fitzgerald & Co., 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 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 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.” Citigroup Global Markets Inc., Evercore Group L.L.C., Guggenheim Securities, LLC and Cantor Fitzgerald & Co. may, in their sole discretion, release any of the securities subject to these lock-up agreements at any time.

Registration Rights

Upon the closing of this offering, pursuant to our Rights Agreement, the holders of 7,728,000 shares of our common stock (including common stock issuable upon conversion of our non-voting 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 “—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 “Description of Capital Stock—Registration Rights” for additional information.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a summary of the 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 special tax accounting rules under Section 451(b) of the Code, alternative minimum tax or the Medicare contribution tax on net investment income, and does not address any U.S. federal non-income tax consequences, including estate or gift tax consequences or any tax consequences arising under any state, local or non-U.S. tax laws. This discussion is based on the Internal Revenue Code of 1986, as amended (Code), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the Internal Revenue Service (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 holder in light of such holder's particular circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to holders subject to special rules under the U.S. federal income tax laws, including:

- U.S. expatriates and certain former citizens or long-term residents of the United States;
- partnerships or entities or arrangements treated as pass-through or disregarded entities for U.S. federal income tax purposes (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;
- "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons that 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 a partnership or an entity or arrangement that is classified as a pass-through 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 purchasing, owning and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF PURCHASING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR NON-U.S. TAX LAWS AND ANY U.S. FEDERAL NON-INCOME 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. person" or a partnership (including any entity or arrangement treated as a pass-through) for U.S. federal income tax purposes. A U.S. person 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 if (1) its administration is subject to the primary supervision of a U.S. court and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

Distributions on Our Common Stock

As described under "Dividend Policy," we have never declared or paid any cash dividends on our capital stock, and we do not anticipate declaring or paying, in the foreseeable future, any cash dividends 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 amount distributed in excess of basis will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under "—Gain On Disposition of Our Common Stock" below.

Subject to the discussions below regarding effectively connected income, backup withholding and Sections 1471 through 1474 of the Code (commonly referred to as FATCA), 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 or IRS Form W-8BEN-E (or applicable successor 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. 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 discussions below regarding backup withholding and FATCA, 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 who is 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 (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 non-U.S. 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. Even if we became a USRPHC, a non-U.S. holder would not be subject to U.S. federal income tax on a sale, exchange, or other taxable disposition of our common stock by reason of our status as an USRPHC so long as our common stock is regularly traded on an established securities market (within the meaning of the applicable regulations) and such non-U.S. holder does not own and is not deemed to own (directly, indirectly, or constructively) more than 5% of our outstanding common stock at any time during the shorter of the five year period ending on the date of disposition and such holder's holding period. However, no assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. If we are a USRPHC and our common stock is not regularly traded on an established securities market, such non-U.S. holder's proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such non-U.S. holder will generally be taxed on any gain 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. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

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. A non-U.S. holder 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) on gain realized upon the sale of other taxable disposition of our common stock, 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.

Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating the amount of distributions on our common stock paid to such holder and the amount of any tax withheld with respect to those distributions. These information reporting requirements apply even if no withholding was required because the distributions were effectively connected with the holder's conduct of a U.S. trade or business, or withholding was reduced or eliminated by an applicable income tax treaty. 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. Dividends paid by us (or our paying agents) to a non-U.S. holder may also be subject to U.S. federal backup withholding, currently imposed at a rate of 24%. Backup withholding 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 otherwise establishes an exemption, and if the payor does not have actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

Proceeds from the sale or other disposition of common stock by a non-U.S. holder effected by or through a U.S. office of a broker will generally be subject to information reporting and backup withholding unless the non-U.S. holder certifies to the withholding agent under penalties of perjury as to, among other things, its status as a non-U.S. holder (which certification may generally be made on an applicable IRS Form W-8) or otherwise establishes an exemption. Payment of disposition proceeds effected outside the United States by or through a non-U.S. office of a non-U.S. broker generally will not be subject to information reporting or backup withholding if the payment is not received in the United States. Information reporting, but generally not backup withholding, will apply to such a payment if the broker has certain connections with the United States unless the broker has documentary evidence in its records that the beneficial owner thereof is a non-U.S. holder and specified conditions are met or an exemption is otherwise established.

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 Payments to Certain Foreign Accounts

FATCA imposes a U.S. federal withholding tax of 30% on certain payments, including dividends on our common stock made to (1) 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 certain 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 or (2) 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.

Although FATCA would have also imposed a federal withholding tax of 30% to payments of gross proceeds from the sale or other disposition of our common stock, the U.S. Treasury Department released proposed regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED OR RECENT CHANGES IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS OR UNDER ANY APPLICABLE TAX TREATY.

UNDERWRITING

Citigroup Global Markets Inc., Evercore Group L.L.C., Guggenheim Securities, LLC, and Cantor Fitzgerald & Co. are acting as joint book-running managers of the offering and as the representatives of the underwriters. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of shares set forth opposite the underwriter's name.

Underwriter	Number of Shares
Citigroup Global Markets Inc.	
Evercore Group L.L.C.	
Guggenheim Securities, LLC	
Cantor Fitzgerald & Co.	
Total	5,000,000

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares (other than those covered by the underwriters' option to purchase additional shares described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount from the initial public offering price not to exceed $ per share. If all the shares are not sold at the initial offering price, the underwriters may change the offering price and the other selling terms. The representatives have advised us that the underwriters do not intend to make sales to discretionary accounts.

If the underwriters sell more shares than the total number set forth in the table above, we have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 750,000 additional shares at the public offering price less the underwriting discounts and commissions. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter's initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We, our officers and directors, and our other security holders, have agreed that, subject to certain specified exceptions, for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of each of the representatives, dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock. The representatives in their sole discretion may release any of the securities subject to these lock-up agreements at any time, which, in the case of officers and directors, shall be with notice.

Prior to this offering, there has been no public market for our shares. Consequently, the initial public offering price for the shares was determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price were our results of operations, our current financial condition, our future prospects, our markets, the economic conditions in and future prospects for the industry in which we compete, our management, and currently prevailing general conditions in the equity securities markets, including current market valuations of publicly traded companies considered comparable to our company. We cannot assure you, however, that the price at which the shares will sell in the public market after this offering will not be lower than the initial public offering price or that an active trading market in our shares will develop and continue after this offering.

We have applied to list our common stock on the Nasdaq Global Market under the symbol "LBPH." Our non-voting common stock will not be listed on any securities exchange.

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Paid by Longboard Pharmaceuticals, Inc.	
	No Exercise	Full Exercise
Per share	$	$
Total	$	$

We estimate that our portion of the total expenses of this offering, excluding underwriting discounts and commissions payable by us, will be approximately $2.3 million. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $40,000.

In connection with the offering, the underwriters may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters' option to purchase additional shares, and stabilizing purchases.

- Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.
  - "Covered" short sales are sales of shares in an amount up to the number of shares represented by the underwriters' option to purchase additional shares.
  - "Naked" short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters' option to purchase additional shares.
- Covering transactions involve purchases of shares either pursuant to the underwriters' option to purchase additional shares or in the open market in order to cover short positions.
  - To close a naked short position, the underwriters must purchase shares in the open market. 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 shares in the open market after pricing that could adversely affect investors who purchase in the offering.
  - To close a covered short position, the underwriters must purchase shares in the open market or must exercise the option to purchase additional shares. In determining the source of shares to close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the underwriters' option to purchase additional shares.
- Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Other Relationships

The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The underwriters and their respective affiliates have in

the past performed, or may in the future perform, commercial banking, investment banking and advisory services for us from time to time for which they have received, or may in the future receive, customary fees and reimbursement of expenses and may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area, each an EEA State, no shares have been offered or will be offered pursuant to the offering to the public in that EEA State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that EEA State or, where appropriate, approved in another EEA State and notified to the competent authority in that EEA State, all in accordance with the EU Prospectus Regulation, except that it may make an offer to the public in that EEA State of any shares at any time under the following exemptions under the EU Prospectus Regulation:

(a) to any legal entity which is a qualified investor as defined under the EU Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the EU Prospectus Regulation), subject to obtaining the prior consent of the underwriters for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the EU Prospectus Regulation,

provided that no such offer of the Shares shall require the Issuer or any Manager to publish a prospectus pursuant to Article 3 of the EU Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the EU Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in any EEA 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 “EU Prospectus Regulation” means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

In relation to the United Kingdom, no shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority in accordance with the UK Prospectus Regulation, except that it may make an offer to the public in the United Kingdom of any shares at any time under the following exemptions under the UK Prospectus Regulation:

(a) to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the underwriters for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the UK Prospectus Regulation,

provided that no such offer of the shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Notice to Prospective Investors in France

Neither this prospectus nor any other offering material relating to the shares described in this prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the shares has been or will be:

- released, issued, distributed or caused to be released, issued or distributed to the public in France; or
- used in connection with any offer for subscription or sale of the shares to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d'investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;
- to investment services providers authorized to engage in portfolio management on behalf of third parties; or
- in a transaction that, in accordance with article L.411-2-II-1°-or-2°-or 3° of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l'épargne*).

The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case 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 in Hong Kong (except if permitted to do so under the 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" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. 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 Singapore other than (i) to an institutional investor under Section 274 of the Securities

and Futures Act, Chapter 289 of Singapore (SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- 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
- 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,

shares, debentures and units of shares and debentures 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:

- to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;
- where no consideration is or will be given for the transfer; or
- where the transfer is by operation of law.

Notice to Prospective Investors in Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia, or the Corporations Act) in relation to the common stock has been or will be lodged with the Australian Securities & Investments Commission, or ASIC. This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

- you confirm and warrant that you are either:
  - a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
  - a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
  - a person associated with the company under section 708(12) of the Corporations Act; or
  - a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and
- you warrant and agree that you will not offer any of the common stock for resale in Australia within 12 months of that common stock being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Notice to Prospective Investors in Canada

The shares may be sold in Canada 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 offering memorandum (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 China

This prospectus does not constitute a public offer of shares, whether by sale or subscription, in the People's Republic of China, or the PRC. The shares are not being offered or sold directly or indirectly in the PRC to or for the benefit of, legal or natural persons of the PRC.

Further, no legal or natural persons of the PRC may directly or indirectly purchase any of the shares or any beneficial interest therein without obtaining all prior PRC's governmental approvals that are required, whether statutorily or otherwise. Persons who come into possession of this document are required by the issuer and its representatives to observe these restrictions.

LEGAL MATTERS

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Cooley LLP, San Diego, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, San Diego, California.

EXPERTS

The financial statements of Longboard Pharmaceuticals, Inc. as of December 31, 2020, and for the period from January 3, 2020 (inception) through December 31, 2020, have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm 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.longboardpharma.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.

LONGBOARD PHARMACEUTICALS, INC.
INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
Longboard Pharmaceuticals, Inc.:

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Longboard Pharmaceuticals, Inc. (the Company) as of December 31, 2020, the related statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the period January 3, 2020 (inception) through December 31, 2020, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the period January 3, 2020 (inception) through December 31, 2020, 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 these financial statements based on our audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit 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 audit 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 audit provides a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2020.

San Diego, California
February 19, 2021, except as to the March Forward Stock Split described in Note 1, which is as of March 8, 2021.

LONGBOARD PHARMACEUTICALS, INC.
BALANCE SHEET
(in thousands, except share data and par value)

	December 31, 2020
Assets	
Current assets:	
Cash	$ 55,316
Other current assets	46
Total current assets	55,362
Deferred financing costs	876
Total assets	$ 56,238
Liabilities, Convertible Preferred Stock and Stockholders' Deficit	
Current liabilities:	
Accounts payable (includes related party amounts of $241)	$ 1,213
Accrued research and development expenses	916
Accrued other expenses	845
Accrued compensation and related expenses	161
Total current liabilities	3,135
Commitments and contingencies (See Note 9)	
Convertible preferred stock:	
Series A convertible preferred stock, $0.0001 par value, 5,600,000 shares authorized, issued and outstanding at December 31, 2020; aggregate liquidation preference – $56,000 at December 31, 2020	55,795
Stockholders' deficit:	
Common stock, $0.0001 par value; 10,500,000 shares authorized, 3,840,540 shares issued and outstanding at December 31, 2020, excluding 348,450 shares subject to repurchase as of December 31, 2020	—
Additional paid-in capital	11,708
Accumulated deficit	(14,400)
Total stockholders' deficit	(2,692)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 56,238

See accompanying notes.

LONGBOARD PHARMACEUTICALS, INC.
STATEMENT OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per share and share data)

	For the Period January 3, 2020 (Inception) through December 31, 2020
Operating expenses:	
Research and development (includes related party amounts of $1,025)	$ 4,633
General and administrative (includes related party amounts of $8,295)	9,767
Total operating expenses	14,400
Loss from operations	(14,400)
Net loss and comprehensive loss	$ (14,400)
Net loss per share, basic and diluted	$ (3.78)
Weighted-average shares outstanding, basic and diluted	3,808,887

See accompanying notes.

LONGBOARD PHARMACEUTICALS, INC.
STATEMENT OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(in thousands, except share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at January 3, 2020 (Inception)	—	$ —	—	$ —	$ —	$ —	$ —
Purchase of common stock by Arena Pharmaceuticals, Inc.	—	—	3,840,540	—	—	—	—
Arena Pharmaceuticals, Inc. capital contributions	—	—	—	—	3,200	—	3,200
Issuance of Series A convertible preferred stock	5,600,000	56,000	—	—	—	—	—
Series A convertible preferred stock issuance costs	—	(205)	—	—	—	—	—
Stock-based compensation	—	—	—	—	8,508	—	8,508
Net loss		—	—	—	—	(14,400)	(14,400)
Balance at December 31, 2020	5,600,000	$ 55,795	3,840,540	$ —	$ 11,708	$ (14,400)	$ (2,692)

See accompanying notes.

LONGBOARD PHARMACEUTICALS, INC.
STATEMENT OF CASH FLOWS
(in thousands)

	For the Period January 3, 2020 (Inception) through December 31, 2020
Cash flows from operating activities:	
Net loss	$ (14,400)
Adjustments to reconcile net loss to net cash used in operating activities:	
Stock-based compensation expense	8,508
Changes in operating assets and liabilities:	
Other current assets	(46)
Accounts payable	1,213
Accrued research and development expenses	916
Accrued other expenses	206
Accrued compensation and related expenses	161
Net cash used in operating activities	(3,442)
Cash flows from financing activities:	
Capital contributions from Arena Pharmaceuticals, Inc.	3,200
Proceeds from Series A convertible preferred stock financing	56,000
Series A convertible preferred stock financing costs	(205)
Deferred financing costs	(237)
Net cash provided by financing activities	58,758
Net increase in cash	55,316
Cash at the beginning of the period	—
Cash at the end of the period	$ 55,316
Supplemental non-cash investing and financing activities:	
Deferred financing costs in accrued other expenses	$ 639

See accompanying notes.

LONGBOARD PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS

1. Organization and Basis of Presentation

Description of Business

Longboard Pharmaceuticals, Inc. (the Company), formerly Arena Neuroscience, Inc., was incorporated in the state of Delaware on January 3, 2020. The Company was organized and initially wholly-owned by Arena Pharmaceuticals, Inc. (Arena), until the closing of its Series A convertible preferred stock (Series A Preferred Stock) financing in October 2020. The Company is a clinical stage biopharmaceutical company focused on developing novel, transformative medicines for neurological diseases. The Company's most advanced product candidate, LP352, is being developed to treat patients with developmental and epileptic encephalopathies and is currently in a Phase 1 clinical trial. The Company's preclinical product candidates include LP143 and LP659, which are focused on developing therapies for central nervous system neuroinflammatory diseases.

Forward Stock Splits

On October 27, 2020, the Company filed an amendment to the Company's certificate of incorporation to effect a forward stock split of shares of the Company's common stock on a 2,783-for-1 basis (October Forward Stock Split). The par value of the common stock was not adjusted as a result of the October Forward Stock Split and the authorized shares were increased to 2,783,000 shares (or 3,840,540 shares of common stock after giving effect to the March Forward Stock Split (as defined below)) of common stock in connection with the October Forward Stock Split. The accompanying financial statements and notes to the financial statements give retroactive effect to the October Forward Stock Split for the period presented.

On March 5, 2021, the Company filed an amendment to the Company's amended and restated certificate of incorporation to effect a forward stock split of shares of the Company's common stock on a 1.38-for-1 basis (March Forward Stock Split). Adjustments corresponding to the March Forward Stock Split were made to the ratio at which the Company's convertible preferred stock will convert into common stock immediately prior to the closing of the initial public offering (IPO). The par value of the common stock and number of shares authorized were not adjusted as a result of the March Forward Stock Split. All references to common stock, options to purchase common stock, share data, per share data, and related information contained in the financial statements and related footnotes have been retrospectively adjusted to reflect the effect of the March Forward Stock Split for all periods presented.

Basis of Presentation

The accompanying financials statements include the financial results from inception (January 3, 2020) through December 31, 2020. The Company's fiscal year-end is December 31. The Company concluded under the guidance in Accounting Standards Codification 805, *Business Combinations* that the Company was not required to present historical carve-out financial results for activity occurring at Arena prior to the Company's formation as the assets licensed to the Company by Arena did not constitute a business. The financial statements include allocations for certain Arena corporate expenses, including equity-related separation costs of $7.4 million related to the Chief Executive Officer's transition from Arena to Longboard as detailed in Note 7, costs of information technology, human resources, accounting, legal, facilities, insurance, treasury and other corporate and infrastructure services. These allocations were made on the basis of the actual hours incurred in providing services to the Company by employees of Arena multiplied by a fully burdened average cost per employee. Management believes such allocation of corporate expenses from Arena is reasonable. Effective October 27, 2020, the Company entered into a formal services agreement with Arena for these services (see Note 6). The financial statements may not include all of the expenses that would have been incurred had the Company been a stand-alone company during the period presented and may not reflect the Company's results of operations, financial position and cash flows had the Company been a stand-alone company during the period presented. The Company also received capital contributions of $3.2 million from Arena to fund start-up activities throughout the

period ended December 31, 2020. The capital contributions from Arena have been presented in additional paid-in capital on the balance sheet and statement of convertible preferred stock and stockholders' deficit.

Since its inception, the Company has devoted substantially all of its resources to organizing and staffing, research and development activities, business planning, raising capital, in-licensing intellectual property rights and establishing its intellectual property portfolio, and providing general and administrative support for these operations. The Company has incurred losses and negative cash flows from operations since commencement of its operations. The Company had an accumulated deficit of $14.4 million and cash of $55.3 million as of December 31, 2020.

From its inception through December 31, 2020, the Company had funded its operations through the capital contributions from Arena and received aggregate gross proceeds of $56.0 million from the sale and issuance of 5,600,000 shares of Series A Convertible Preferred Stock in October 2020 (see Note 5). Management believes that its capital resources as of December 31, 2020 will be sufficient to fund the Company's operations for at least twelve months after the date these financial statements are issued.

The Company plans to finance its future cash needs through public or private equity or debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. If the Company is not able to secure adequate additional funding, it may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, and/or delay or reduce the scope of its planned development programs. Any of these actions could materially harm the Company's business, results of operations and future prospects.

2. Summary of Significant Accounting Policies

Use of Estimates

The Company's financial statements are prepared in accordance with accounting principles generally accepted in the United States (GAAP). The preparation of the Company's financial statements requires the Company to make estimates and assumptions that impact the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in the financial statements and accompanying notes. Such estimates include the accrual of research and development expenses and stock-based compensation. Management evaluates its estimates on an ongoing basis. Although estimates are based on the Company's historical experience, knowledge of current events and actions it may undertake in the future, actual results may materially differ from these estimates and assumptions.

Concentration of Credit Risk

Financial instruments which potentially subject the Company to significant concentration of credit risk consist of cash. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts, and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Deferred Financing Costs

The Company has deferred financing costs consisting of legal, accounting and other fees and costs directly attributable to its planned IPO. The deferred financing costs will be offset against the proceeds received upon the completion of the planned IPO. In the event the planned IPO is terminated, all of the deferred financing costs will be expensed within the Company's statement of operations and comprehensive loss. As of December 31, 2020, $0.9 million of deferred financing costs were recorded on the balance sheet.

Comprehensive Loss

Comprehensive loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources, including unrealized gains and losses on investments and foreign currency gains and losses. Net loss and comprehensive loss were the same for the period presented.

Fair Value of Financial Instruments

The carrying amounts of other current assets and accrued expenses are considered to be representative of their respective fair values because of the short-term nature of those instruments.

Research and Development Expenses

Research and development expenses are expensed in the periods in which they are incurred. External expenses consist primarily of payments to Arena, outside consultants and contract research organizations in connection with the Company's discovery, preclinical and clinical activities, process development, manufacturing activities, regulatory and other services. External expenses are recognized based on an evaluation of the progress to completion of specific tasks using information provided to the Company by its service providers or the estimate of the level of service that has been performed at each reporting date. In addition to those external costs, the Company incurred research and development expenses through the services agreements described in Note 6. Research and development expenses amounted to $4.6 million for the period from January 3, 2020 (inception) through December 31, 2020.

Stock-Based Compensation

On October 27, 2020, the Company's board of directors and stockholder approved the 2020 Equity Incentive Plan (the 2020 Plan). Under the 2020 Plan, awards are measured at fair value and recognized over the requisite service period. Forfeitures are accounted for in the period they occur. The Company estimates the fair value of each stock-based award on the date of grant using the Black-Scholes option pricing model which requires the input of subjective assumptions, including price volatility of the underlying stock, risk-free interest rate, dividend yield, and expected term of the option.

From January 3, 2020 through October 26, 2020, Company employees participated in Arena's stock incentive plan and therefore the Company used Arena's Black-Scholes fair value, and underlying inputs and assumptions, to recognize stock-based compensation. Stock-based awards were measured at fair value and recognized over the requisite service period. There were no forfeitures.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

As of December 31, 2020, the Company maintained valuation allowances against its deferred tax assets as the Company concluded it had not met the "more likely than not" to be realized threshold. Changes in the

valuation allowance when they are recognized in the provision for income taxes would result in a change in the estimated annual effective tax rate.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business as one operating segment. No product revenue has been generated since inception and all assets are held in the United States.

Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock and potentially dilutive securities outstanding for the period. As the Company has reported a net loss for the period presented, diluted net loss per share of common stock is the same as basic net loss per share of common stock for the period.

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share attributable to common stockholders for the period presented because including them would have been anti-dilutive:

	Year Ended December 31, 2020
Options to purchase common stock	873,264
Restricted stock awards, issued but unvested	348,450
Series A Preferred Stock (on an as-converted to common stock basis)	7,728,000
Total	8,949,714

Recent Accounting Pronouncements

In June 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting*, which expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees and simplifies the accounting for nonemployee share-based payment transactions. The accounting for share-based payments to nonemployees and employees will be substantially aligned because of this update. This ASU specifies that Topic 718 applies to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. This ASU also clarifies that Topic 718 does not apply to share-based payments used to effectively provide (i) financing to the issuer or (ii) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under FASB ASU No. 2014-09, *Revenue From Contracts with Customers* (Topic 606). The transition method provided by ASU No. 2018-07 is a modified retrospective basis, which recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. For public business entities, this ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted but may take place no earlier than a company's adoption date of Topic 606, Revenue from Contracts with Customers. The Company adopted this standard as of January 3, 2020 (inception). The adoption of this ASU did not have an impact on the Company's financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (ASU 2016-02), which supersedes FASB Accounting Standards Codification *Topic 840, Leases* (Topic 840), and provides principles for the recognition, measurement, presentation and disclosure of leases for both 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 for finance leases or on a straight-line basis over the term of the lease for operating leases. 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 classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases. For companies that are not emerging growth companies, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018. For emerging growth companies, the ASU was to be effective for fiscal years beginning after December 15, 2019. However, in June 2020, the FASB issued ASU 2020-05, Revenue from Contracts with Customers (Topic 606) and *Leases (Topic 842)*: Effective Dates for certain Entities, which deferred the effective date of ASU 2016-02 for certain entities. As a result, the ASU is now effective for emerging growth companies for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. The Company plans to adopt the new standard in the first quarter of 2022 using the modified retrospective method, under which the Company applies Topic 842 to existing and new leases as of January 1, 2022, but prior periods will not be restated and will continue to be reported under Topic 840 guidance in effect during those periods. The Company is currently evaluating the impact the adoption of these ASUs will have on its financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes—Simplifying the Accounting for Income Taxes* (ASU 2019-12). Among other items, the amendments in ASU 2019-12 simplify the accounting treatment of tax law changes and year-to-date losses in interim periods. An entity generally recognizes the effects of a change in tax law in the period of enactment; however, there is an exception for tax laws with delayed effective dates. Under current guidance, an entity may not adjust its annual effective tax rate for a tax law change until the period in which the law is effective. This exception was removed under ASU 2019-12, thereby providing that all effects of a tax law change are recognized in the period of enactment, including adjustment of the estimated annual effective tax rate. Regarding year-to-date losses in interim periods, an entity is required to estimate its annual effective tax rate for the full fiscal year at the end of each interim period and use that rate to calculate its income taxes on a year-to-date basis. However, current guidance provides an exception that when a loss in an interim period exceeds the anticipated loss for the year, the income tax benefit is limited to the amount that would be recognized if the year-to-date loss were the anticipated loss for the full year. ASU 2019-12 removes this exception and provides that, in this situation, an entity would compute its income tax benefit at each interim period based on its estimated annual effective tax rate. ASU 2019-12 is effective for fiscal years beginning after December 15, 2020, including interim periods within those annual periods. Early adoption is permitted. The Company plans to adopt this new standard in the first quarter of 2021 and does not expect the ASU to have a material impact on its financial statements and related disclosures.

Risks and Uncertainties

In December 2019, COVID-19, a novel strain of coronavirus, was first reported in Wuhan, China and has since become a global pandemic. The virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to over 100 countries, including the United States. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world.

Potential impacts to the Company’s business include, but are not limited to, temporary closures of those facilities of its vendors, disruptions or restrictions on its employees’ ability to travel, disruptions to or delays in ongoing laboratory experiments, preclinical studies, clinical trials, third-party manufacturing supply and other operations, the potential diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, interruptions or delays in the operations of the U.S. Food and Drug Administration or other regulatory authorities, and the Company’s ability to raise capital and conduct business development activities.

3. Fair Value Measurements

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 — Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 — Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 — Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e. supported by little or no market activity).

As of December 31, 2020, the Company did not have financial assets or liabilities that are measured at fair value on a recurring basis.

4. Accrued Other Expenses

Accrued other expenses consisted of the following (in thousands):

	December 31, 2020
Accrued financing costs	$ 639
Accrued consulting fees	115
Accrued other	91
	$ 845

5. Convertible Preferred Stock and Stockholders' Deficit

Amended and Restated Certificate of Incorporation

In October 2020, the Company amended and restated the Company's certificate of incorporation to, among other things, increase the authorized shares of common stock and preferred stock to 10,500,000 shares and 5,600,000 shares, respectively, and to establish the Series A Preferred Stock and the rights, preferences, powers and privileges thereof.

Common Stock

As of December 31, 2020, the Company has 3,840,540 shares of common stock outstanding, excluding 348,450 shares subject to repurchase. 3,840,540 shares were purchased by Arena for aggregate consideration of $0.10 in January 2020.

Series A Preferred Stock

In October 2020, the Company issued and sold 5,600,000 shares of Series A Preferred Stock at a price of $10.00 per share, resulting in gross proceeds of $56.0 million, including 100,000 shares purchased by Arena. The Company incurred $0.2 million in issuance costs related to the Series A Preferred Stock financing.

The Series A Preferred Stock has the following terms:

Dividends

Holders of the Series A Preferred Stock, in preference to any distributions to the holders of common stock, shall be entitled to receive dividends at a rate at least equal to (i) in the case of a dividend on common stock or any class or series that is convertible into common stock equal to the product of (a) the dividend payable on each share of such class as if each share had been converted to common stock and (b) the number of shares of common stock issuable upon conversion of a share of Series A Preferred Stock or in the case of a dividend on any class of series that is not convertible into common stock, at a rate per share of Series A Preferred Stock determined by (a) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock and (b) multiplying such fraction by the original issuance price of the Series A Preferred Stock of $10.00 per share (Original Issue Price). Such dividends shall be payable only when and if declared by the Company's board of directors and shall not be cumulative.

Preference on Liquidation

The holders of the Series A Preferred Stock are entitled to receive liquidation preferences at the Original Issue Price, plus all accrued and declared but unpaid dividends. Liquidation payments to the holders of the Series A Preferred Stock have priority and are made in preference to any payments to the holders of common stock. After full payment of the liquidation preference to the holders of the Series A Preferred Stock, the remaining assets, if any, will be distributed ratably to the holders of the common stock.

A liquidation event is deemed to occur unless at least a majority of the outstanding shares of Series A Preferred Stock elects otherwise, if the Company (i) merges or consolidates with any other company, and the stockholders of the Company no longer own at least a majority of the voting power of the surviving entity, (ii) sells all or substantially all of the Company's assets, and (iii) sells or disposes of one or more subsidiary holding substantially all of the Company's assets, to a party not owned by the Company.

Conversion Rights

The shares of Series A Preferred Stock are convertible into an equal number of shares of common stock, at the option of the holder, subject to certain anti-dilution adjustments. The conversion rate for the convertible preferred stock is determined by dividing the Original Issue Price, as adjusted for stock splits, by the conversion price. The conversion price is initially equal to the Original Issue Price, but is subject to adjustment for dividends, stock splits, and other distributions. The Series A Preferred Stock will initially convert on a one-for-one basis into shares of the Company's common stock. Each share of Series A Preferred Stock will automatically convert into shares of common stock at the then-effective conversion rate (i) upon the closing of the sale of shares of common stock to the public at a price of at least 1.33 times the Original Issue Price (subject to appropriate adjustment), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least $50.0 million of gross proceeds to the Company and in connection with such offering, the common stock is listed for trading on the Nasdaq Stock Market's National Market, the New York Stock Exchange or another exchange or marketplace approved by the Company's board of directors, including at least one director appointed by the holders of Series A Preferred Stock, or (ii) upon written request for such conversion from the holders of at least a majority of the outstanding shares of Series A Preferred Stock.

Redemption Rights

The holders of Series A Preferred Stock do not have any redemption rights.

Voting

The holder of each share of Series A Preferred Stock is entitled to one vote for each share of common stock into which it would convert. The approval of the holders of a majority of the voting power of the outstanding shares of convertible preferred stock are required in order to take the following actions: amend or repeal any provisions in the charter or bylaws if it would adversely impact the convertible preferred stock holders, authorize, issue or obligate the issuance of options or shares (or securities convertible or exchangeable for options or shares) of any class superior to or on a parity with the convertible preferred stock, reclassify any common stock into shares having rights superior to or on a parity with the convertible preferred stock, increase the authorized number of shares of preferred stock, increase or reduce the authorized number of members of the board of directors, and create or hold capital stock in any subsidiary not wholly owned by the Company, dispose of any capital stock of any subsidiary or permit any subsidiary to dispose of all or substantially all of the assets of such subsidiary.

Classification

The Company's Series A Preferred Stock has been classified as temporary equity in the accompanying balance sheet in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities whose redemption is based upon certain change in control events outside of the Company's control, including liquidation, sale or change of control of the Company. The Company has determined not to adjust the carrying values of the convertible preferred stock to the liquidation preferences of such shares because of the uncertainty of whether or when such events would occur. Adjustments to increase the carrying values to the respective liquidation preferences will be made if and when it becomes probable that an event would occur obligating the Company to pay such amounts.

6. Agreements with Arena Pharmaceuticals, Inc.

The Company entered into a license agreement (License Agreement), a services agreement (Services Agreement), and a royalty purchase agreement (Royalty Purchase Agreement) in October 2020 with Arena. The following section summarizes these related party agreements.

License Agreement

Pursuant to the License Agreement, the Company obtained an exclusive, royalty bearing, sublicensable, worldwide license under certain know-how and patents of Arena to develop and commercialize LP352 for any use in humans, LP143 for the treatment of any CNS indication in humans (excluding the treatment, prevention or amelioration of pain or any gastrointestinal, non-CNS autoimmune or cardiovascular disorder), and LP659 for the treatment of selected CNS indications in humans (pharmaceutical products containing any such compounds, Licensed Products). As consideration for the rights granted to the Company under the License Agreement, the Company will be required to pay to Arena a mid-single digit royalty on net sales of Licensed Products of LP352, and a low-single digit royalty on net sales of all other Licensed Products, by the Company, its affiliates or its sublicensees, subject to standard reductions. The Company's royalty obligations continue on a Licensed Product-by-Licensed Product and country-by-country basis until the later of the (i) tenth anniversary of the first commercial sale of such product in such country or (ii) expiration of the last-to-expire valid claim of the patents licensed by us under the License Agreement covering the manufacture, use or sale of such product in such country.

Services Agreement

In connection with the License Agreement, the Company also entered into a Services Agreement with Arena under which Arena agreed to perform certain research and development services, general administrative services, management services and other mutually agreed services for the Company and receive service fees therefor on an hourly rate based on an annual full time equivalent rate agreed upon by the parties. Arena will invoice the Company for services provided on a monthly basis, in arrears. The Services Agreement shall continue until December 31, 2021, and

shall automatically renew for successive one-year terms unless terminated by either party. Services provided under the Services Agreement are recorded to research and development expenses or general and administrative expenses, on the statement of operations, as appropriate.

Royalty Purchase Agreement

In October 2020, the Company entered into a Royalty Purchase Agreement with 356 Royalty Inc., a wholly owned subsidiary of Arena (356 Royalty) and Arena, pursuant to which we purchased the right to receive all milestone payments, royalties, interest and other payments relating to net sales of lorcaserin, owed or otherwise payable to 356 Royalty by Eisai Inc. and Eisai Co., Ltd. pursuant to the Transaction Agreement, by and among 356 Royalty, Eisai Inc. and Eisai Co., Ltd. The Company made a one-time payment to Arena of $0.1 million. The Company expensed this amount to research and development expense on the statement of operations and comprehensive loss as lorcaserin is subject to regulatory approval and there are risks and uncertainties as to whether royalties will ultimately be paid and collected.

7. Stock-Based Compensation

Adoption of 2020 Equity Incentive Plan

On October 27, 2020, the Company's board of directors and stockholder approved the 2020 Plan. Under the terms of the 2020 Plan, the Company may issue (1) stock options (incentive and nonstatutory), (2) stock appreciation rights, (3) restricted stock awards, (4) restricted stock units and (5) other stock awards. The 2020 Plan authorized and provides for the issuance of up to 2,369,460 shares of common stock, which amount will be increased to the extent that awards granted under the 2020 Plan are forfeited, expire or are settled for cash (except as otherwise provided in the 2020 Plan). The Company's board of directors determines the exercise price, vesting and expiration period of the grants under the 2020 Plan.

Stock Award Grants under the 2020 Plan

From October 27, 2020 through December 31, 2020, 873,264 stock options were granted to the Company's employees, directors and consultants under the 2020 Plan, which vest over a two to four year period, based on continuous service.

A summary of the Company's 2020 Plan stock option activity is as follows:

	Number of Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in Years)
Balance at October 27, 2020	—	$ —	—
Options granted	873,264	3.42	9.9
Options exercised	—	—	—
Options cancelled	—	—	—
Balance at December 31, 2020	873,264	$ 3.42	9.9
Options exercisable at December 31, 2020	348,450	$ 3.12	9.8

No stock options were vested as of December 31, 2020, however, 348,450 stock options are subject to an early exercise provision. The intrinsic value of options outstanding and exercisable as of December 31, 2020 were both $0.2 million.

The following table presents the weighted-average assumptions used for the stock option grants for the period from October 27, 2020 through December 31, 2020, along with the related grant date fair value:

	For the Period October 27, 2020 through December 31, 2020
Stock price	$ 3.42
Risk-free interest rate	0.56%
Dividend yield	0.00%
Expected volatility	72.14%
Expected life (years)	6.8
Estimated grant date fair value per share of award granted	$ 2.25

Determination of Fair Value of Common Stock. As there has been no public market for the Company's common stock to date, the estimated fair value of common stock has been determined by the Company's board of directors as of the date of each option grant, with input from management, considering the most recently available third-party valuations of common stock and the board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. Historically, these independent third-party valuations of our equity instruments were performed contemporaneously with identified value inflection points. These third-party valuations were performed in accordance with the guidance outlined in the *American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (Practice Aid). The Practice Aid identifies various available methods for allocating the enterprise value across classes of series of capital stock in determining the fair value of the common stock at each valuation date.

In addition to considering the results of these independent third-party valuations, the Company's board of directors considered various objective and subjective factors to determine the fair value of its common stock as of each grant date, including: the prices of the preferred stock sold to or exchanged between outside investors in arm's length transactions and the rights, preferences and privileges of the preferred stock as compared to those of the Company's common stock including liquidation preferences of the Company's preferred stock; the progress of the Company's research and development programs, including the status and results of preclinical and clinical trials for product candidates; the stage of development and material risks related to the Company's business; external market and other conditions affecting the biopharmaceutical industry and trends within the biopharmaceutical industry; the Company's business conditions and projections; the Company's financial position and its historical and forecasted performance and operating results; the lack of an active public market for the Company's common stock and preferred stock; the likelihood of achieving a liquidity event for the Company's securityholders, such as an initial public offering or a sale of the Company in light of prevailing market conditions; the hiring of key personnel and the experience of management; and the analysis of initial public offerings and the market performance of similar companies in the biopharmaceutical industry, as well as trends and developments in the biopharmaceutical industry.

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

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities similar to the expected term of the awards.

Expected dividend yield. The Company bases the expected dividend yield assumption on the fact that it has never paid cash dividends and has no present intention to pay cash dividends and, therefore, used an expected dividend yield of zero.

Expected volatility. Since the Company is not yet a public company and does not have a trading history for its common stock, the expected volatility assumption is based on volatilities of a peer group of similar companies whose share prices are publicly available. The peer group was developed based on companies in the biotechnology industry. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.

Expected life. The expected life represents the period of time that options are expected to be outstanding. Because the Company does not have historical exercise behavior, it determines the expected life assumption using the simplified method, for employees, which is an average of the contractual term of the option and its vesting period. The expected term for nonemployee options is equal to the contractual term.

In October 2020, 348,450 restricted stock awards were granted to an employee under the 2020 Plan, which vest over three years and had an estimated fair value of $3.12 per share at the time of grant.

There were 1,147,746 shares available for grant under the 2020 Plan as of December 31, 2020.

Stock Award Grants under the Arena Amended and Restated 2017 Long-Term Incentive Plan (Arena 2017 LTIP)

Prior to October 27, 2020, the Company did not have its own equity incentive plan. Stock award grants from the period of January 3, 2020 through October 26, 2020, were made under the Arena 2017 LTIP, a plan approved by Arena's stockholders. Under the Arena 2017 LTIP, Arena may grant incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance awards.

Under the Arena 2017 LTIP, 70,000 stock options were granted to the Company's Chief Executive Officer. Stock options under the Arena 2017 LTIP generally vest over four years with 25% of the shares subject to each option vesting on the first anniversary of the grant date and the remainder vesting monthly over the following three years in equal installments and have contractual terms of seven years. All option grants provide for an option exercise price equal to the closing market value share of Arena's common stock on the date of grant.

As of October 27, 2020, in connection with the Series A Preferred Stock financing, the employees of the Company are no longer eligible to participate in the Arena 2017 LTIP.

The following table presents the assumptions used for the stock option grants under the Arena 2017 LTIP for the period from January 3, 2020 (inception) through October 26, 2020, along with the related grant date fair value:

	For the Period January 3, 2020 (Inception) through October 26, 2020
Stock price	$ 44.60
Risk-free interest rate	0.89%
Dividend yield	0.00%
Expected volatility	$ 57.80
Expected life (years)	4.5
Estimated fair value per share of stock options granted	$ 21.02

In connection with the Series A Preferred Stock financing and the formal commencement of the Chief Executive Officer's (Mr. Lind's) employment with the Company, Mr. Lind entered into a Separation Agreement with Arena (Separation Agreement). Pursuant to the Separation Agreement, Mr. Lind voluntarily resigned his employment with Arena, effective October 27, 2020. Such resignation did not affect Mr. Lind's status as the President and Chief Executive Officer of the Company. The Separation Agreement provided for the acceleration of vesting and the extension of the exercise period for equity awards outstanding at Arena as of the separation date.

Stock-Based Compensation Expense

The Company recognized $8.5 million of stock-based compensation expense for the period ended December 31, 2020. This amount includes a one-time expense of $7.4 million related to the acceleration of vesting and the extension of the exercise period for Mr. Lind's equity awards outstanding at Arena, as well as $1.0 million related to awards granted under the Arena 2017 LTIP and $0.2 million related to awards granted under the 2020 Plan. Total expenses of $8.3 million and $0.2 million were included in general and administrative and research and development expenses, respectively, on the statement of operations and comprehensive loss. As of December 31, 2020, unrecognized stock-based compensation expense was $2.9 million, which is expected to be recognized over a remaining weighted average period of approximately 3.4 years.

8. Income Taxes

Significant components of the Company's provision for income taxes and income taxes computed using the U.S. federal statutory corporate tax rate were as follows (in thousands):

	For the Period January 3, 2020 (Inception) through December 31, 2020
Benefit for income taxes at statutory federal rate	$ (3,024)
Permanent items	1,764
Research and development credits	(161)
Change in valuation allowance	1,421
Provision for income taxes	$ —

Significant components of the Company's deferred taxes were as follows (in thousands):

	December 31, 2020
Deferred tax assets:	
Net operating loss carryforward	$ 1,204
Research and development carryforwards	161
Stock-based compensation expense	23
Other, net	33
Total deferred tax assets	1,421
Less: Valuation allowance	(1,421)
Net deferred tax assets	$ —

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company has established a valuation allowance against net deferred tax assets due to the uncertainty that such assets will be realized. The Company will periodically evaluate the recoverability of its deferred tax assets. Due to the Company's losses, management determined it more likely than not that the deferred tax asset will not be realized. The valuation allowance for the period ended December 31, 2020 was $1.4 million.

As of December 31, 2020, the Company had federal net operating loss (NOL) carryforwards of $5.7 million that will not expire. As of December 31, 2020, the Company also had federal and California research and development tax credit carryforwards, net of reserves, of $113,000 and $49,000, respectively. Federal credit carryforwards will begin to expire after 2040 unless previously utilized. The California research and development credit carries forward indefinitely.

Pursuant to the Internal Revenue Code of 1986, as amended (IRC), Sections 382 and 383, annual use of the Company's NOL 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 have occurred or occurs in the future, the amount of remaining tax attribute carryforwards available to offset taxable income and income tax expense in future years may be restricted or eliminated. If eliminated, the related asset would be removed from deferred tax assets with a corresponding reduction in the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, will not impact the Company's effective tax rate.

Uncertain tax positions are evaluated based upon the facts and circumstances that exist at each reporting period. Subsequent changes in judgement based upon new information may lead to changes in recognition, derecognition, and measurement. Adjustment may result, for example, upon resolution of an issue with the taxing authorities or expiration of a statute of limitations barring an assessment for an issue.

The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination by tax authorities.

As of December 31, 2020, the Company had gross unrecognized tax benefits of $31,000, none of which would affect the effective tax rate if recognized. The Company does not anticipate any significant changes in its unrecognized tax benefits over the next 12 months. The Company's policy is to recognize interest expense and/or penalties related to income tax matters as a component of income tax expense. The Company had no accrual for interest or penalties on its balance sheet as of December 31, 2020 and has not recognized interest and/or penalties in its statement of operations and comprehensive loss for the period ended December 31, 2020.

The Company is subject to taxation in the United States and California. The Company is not currently under examination by any taxing authorities. Due to the carryover nature of tax attributes, the statute of limitations is currently open for tax years since inception.

9. Commitments and Contingencies

Leases

The Company leases certain office space in San Diego, California under a month to month lease. Rent payments are approximately $1,000 per month. Rent expense totaled approximately $9,000 for the period January 3, 2020 (inception) through December 31, 2020.

Contingencies

From time to time, the Company may become subject to claims or suits arising 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. As of December 31, 2020, the Company is not a party to any litigation.

10. Employment Benefits

The Company's employees who had been Arena employees were eligible to participate in Arena's employee 401(k) salary deferral plan, which covers all Arena employees. Employees made contributions by withholding a percentage of their salary up to the IRC annual limit. The Company made matching contributions of $16,000 from January 3, 2020 (inception) through October 26, 2020. After that date, the Company's employees were no longer eligible to participate in Arena's employee 401(k) salary deferral plan. The Company did not have a 401(k) salary deferral plan as of December 31, 2020.

11. Subsequent Events

The Company has evaluated subsequent events through February 19, 2021, the date the financial statements were issued, except for the March Forward Stock Split, discussed below. Except as described below, the Company has concluded that no subsequent events have occurred that require disclosure.

From January 1, 2021 through February 19, 2021, 194,269 stock options were granted to the Company's employees under the 2020 Plan, which vest over a four year period.

On March 5, 2021, the Company filed an amendment to the Company's amended and restated certificate of incorporation to effect the March Forward Stock Split. Adjustments corresponding to the March Forward Stock Split were made to the ratio at which the Company's convertible preferred stock will convert into common stock immediately prior to the closing of the IPO. The par value of the common stock and number of shares authorized were not adjusted as a result of the March Forward Stock Split. All references to common stock, options to purchase common stock, share data, per share data, and related information contained in the financial statements and related footnotes have been retrospectively adjusted to reflect the effect of the March Forward Stock Split for all periods presented.

5,000,000 Shares

Longboard Pharmaceuticals, Inc.

Common Stock

PRELIMINARY PROSPECTUS

, 2021

Citigroup **Evercore ISI** **Guggenheim Securities** **Cantor**

Through and including , 2021 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Unless otherwise indicated, all references to "Longboard," the "company," "we," "our," "us" or similar terms refer to Longboard 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 (SEC) registration fee, the Financial Industry Regulatory Authority, Inc. (FINRA) filing fee and the exchange listing fee.

SEC registration fee	$ 10,038
FINRA filing fee	14,300
Exchange listing fee	150,000
Printing and engraving expenses	300,000
Legal fees and expenses	1,300,000
Accounting fees and expenses	475,000
Custodian transfer agent and registrar fees	4,000
Miscellaneous expenses	96,662
Total	$ 2,350,000

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law 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. Our amended and restated certificate of incorporation that will be in effect on the closing of this offering permits indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws that will be in effect upon 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 Delaware General Corporation Law.

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 Longboard Pharmaceuticals, Inc., 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 Longboard Pharmaceuticals, Inc.

At present, there is no pending litigation or proceeding involving a director or officer of Longboard Pharmaceuticals, Inc. 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 our inception on January 3, 2020. Also included is the consideration received by us for such securities and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

1. In January 2020, we sold and issued an aggregate of 3,840,540 shares of common stock to Arena Pharmaceuticals, Inc. for aggregate consideration of $0.10.
2. In October 2020, we sold and issued an aggregate of 5,600,000 shares of Series A preferred stock to a total of 17 accredited investors at a purchase price of $10.00 per share, for an aggregate purchase price of $56.0 million.
3. In October 2020, we issued an aggregate of 348,450 shares of our common stock pursuant to a restricted stock award grant notice to Kevin R. Lind, our President, Chief Executive Officer and director, as consideration for his services to us.
4. From January 3, 2020 to the effective date of this registration statement, we granted stock options under our 2020 equity incentive plan, to purchase up to an aggregate of 1,067,533 shares of our common stock to our employees, at a weighted-average exercise price of $4.34 per share. Through the effective date of this registration statement, no shares of common stock were issued upon the exercise of options granted to employees, directors and consultants and no payments were made.
5. In February 2021, we approved the grant of stock options to purchase 110,933 shares of our common stock to certain of our directors and employees under our 2021 Equity Incentive Plan, which grants are contingent and effective upon the effectiveness of this registration statement and will have an exercise price that is equal to the price per share at which our common stock is first sold to the public in this offering.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or our public offering. Unless otherwise specified above, we believe that the transactions described in paragraphs 1 and 2 were exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder). The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

The offers, sales and issuances of the securities described in paragraphs (3), (4) and (5) were deemed to be exempt from registration under the Securities Act in reliance on either Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701 or Section 4(a)(2) in that the issuance of securities to the accredited investors did not involve a public offering. The recipients of such securities were our employees, directors or bona fide consultants and received the securities under the Prior Plan.

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 upon the closing of this offering.
3.3#	Amended and Restated Bylaws, as currently in effect.
3.4#	Form of Amended and Restated Bylaws, to be in effect upon the closing of this offering.
4.1	Form of Common Stock Certificate.
4.2#	Investors' Rights Agreement by and among the registrant and certain of its stockholders, dated October 27, 2020.
5.1	Opinion of Cooley LLP.
10.1¥#	Longboard Pharmaceuticals, Inc. 2020 Equity Incentive Plan.
10.2¥#	Forms of grant notice, stock option agreement and notice of exercise under the Longboard Pharmaceuticals, Inc. 2020 Equity Incentive Plan.
10.3¥	Forms of restricted stock award grant notice and restricted stock award terms and conditions under the Longboard Pharmaceuticals, Inc. 2020 Equity Incentive Plan.
10.4¥	Longboard Pharmaceuticals, Inc. 2021 Equity Incentive Plan.
10.5¥	Forms of grant notice, stock option agreement and notice of exercise under the Longboard Pharmaceuticals, Inc. 2021 Equity Incentive Plan.
10.6¥	Longboard Pharmaceuticals, Inc. 2021 Employee Stock Purchase Plan.
10.7¥	Longboard Pharmaceuticals, Inc. Performance Bonus Plan.
10.8¥#	Form of Indemnification Agreement by and between the registrant and each director and executive officer.
10.9¥	Non-Employee Director Compensation Policy.
10.10¥‡	Amended and Restated Employment Agreement by and between the registrant and Kevin R. Lind, dated March 1, 2021.
10.11¥‡	Amended and Restated Offer Letter by and between the registrant and Philip Perera, M.D., dated March 1, 2021.
10.12¥‡	Amended and Restated Offer Letter by and between the registrant and Brandi L. Roberts, dated March 1, 2021.
10.13*#	License Agreement by and between the registrant and Arena Pharmaceuticals, Inc., dated October 27, 2020.
10.14#	Royalty Purchase Agreement by and among the registrant, Arena Pharmaceuticals, Inc. and 356 Royalty Inc., dated October 27, 2020.
10.15‡#	Services Agreement by and between the registrant and Arena Pharmaceuticals, Inc., dated October 27, 2020.
10.16	Exchange Agreement by and among the registrant and the stockholders listed therein, dated March 5, 2021.
23.1	Consent of KPMG LLP, independent registered public accounting firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1#	Power of Attorney.

Previously filed.

* Certain portions of this exhibit are omitted because they are not material and would likely cause competitive harm to the registrant if disclosed.

¥ Indicates management contract or compensatory plan

‡ Schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The registrant undertakes to furnish supplemental copies of any of the omitted schedules upon request by the SEC.

(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) 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 SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(b) 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in San Diego, California on March 8, 2021.

LONGBOARD PHARMACEUTICALS, INC.

By: /s/ Kevin R. Lind
Name: Kevin R. Lind
Title: President and Chief Executive Officer

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
/s/ Kevin R. Lind Kevin R. Lind	President, Chief Executive Officer and Director (*Principal Executive Officer*)	March 8, 2021
/s/ Brandi L. Roberts Brandi L. Roberts	Chief Financial Officer (*Principal Financial and Accounting Officer*)	March 8, 2021
* Vincent E. Aurentz	Director	March 8, 2021
 Corinne Le Goff, Pharm.D.	Director	
/s/ Casey C. Lynch Casey C. Lynch	Director	March 8, 2021
* Phillip M. Schneider	Director	March 8, 2021
* Paul J. Sekhri	Director	March 8, 2021

*By: /s/ Kevin R. Lind
Kevin R. Lind
Attorney-in-Fact

Exhibit 1.1

Longboard Pharmaceuticals, Inc.

[•] Shares
Common Stock
($0.0001 par value)

Underwriting Agreement

New York, New York
[•], 2021

Citigroup Global Markets Inc.
Evercore Group L.L.C.
Guggenheim Securities, LLC
Cantor Fitzgerald & Co.
As Representatives of the several Underwriters

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

c/o Evercore Group L.L.C.
55 East 52nd Street
New York, New York 10055

c/o Guggenheim Securities, LLC
330 Madison Avenue
New York, New York 10017

c/o Cantor Fitzgerald & Co.
499 Park Avenue
New York, New York 10022

Ladies and Gentlemen:

Longboard Pharmaceuticals, Inc., a corporation organized under the laws of Delaware (the "Company"), proposes to sell to the several underwriters named in Schedule I hereto (the "Underwriters"), for whom you (the "Representatives") are acting as representatives, [•] shares of common stock, $0.0001 par value ("Common Stock") of the Company (said shares to be issued and sold by the Company being hereinafter called the "Underwritten Securities"). The Company also proposes to grant to the Underwriters an option to purchase up to [•] additional shares of Common Stock solely to cover over-allotments, if any (the "Option Securities"; the Option Securities, together with the Underwritten Securities, being hereinafter called the "Securities"). To the extent there are no additional Underwriters listed on Schedule I other than you, the term Representatives as used herein shall mean you, as Underwriters, and the terms Representatives and Underwriters shall mean either the singular or plural as the context requires.

As used in this underwriting agreement (this "Agreement"), the "Registration Statement" means the registration statement referred to in paragraph 1(a) hereof, including the exhibits, schedules, if any, and financial statements and any prospectus supplement relating to the Securities that is filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b) under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (the "Securities Act") and deemed part of such registration statement pursuant to Rule 430A under the Securities Act ("Rule 430A"), as amended at the date and time that this Agreement is executed and delivered by the parties hereto (the "Execution Time"), and, in the event any post-effective amendment thereto or any registration statement and any amendments thereto filed pursuant to Rule 462(b) under the Securities Act (a "Rule 462(b) Registration Statement") becomes effective prior to the Closing Date (as defined in Section 3 hereof), shall also mean such registration statement as so amended or such Rule 462(b) Registration Statement, as the case may be; the "Effective Date" means each date and time that the Registration Statement, any post-effective amendment or amendments thereto or any Rule 462(b) Registration Statement became or becomes effective; the "Preliminary Prospectus" means any preliminary prospectus referred to in paragraph 1(a) hereof and any preliminary prospectus included in the Registration Statement at the Effective Date that omits information with respect to the Securities and the offering thereof permitted to be omitted from the Registration Statement when it becomes effective pursuant to Rule 430A (the "Rule 430A Information"); and the "Prospectus" means the prospectus relating to the Securities that is first filed pursuant to Rule 424(b) under the Securities Act ("Rule 424(b)") after the Execution Time.

As used in this Agreement, the "Disclosure Package" shall mean (i) the Preliminary Prospectus that is generally distributed to investors and used to offer the Securities, (ii) any issuer free writing prospectus, as defined in Rule 433 under the Securities Act (an "Issuer Free Writing Prospectus"), identified in Schedule II hereto, and (iii) any other free writing prospectus, as defined in Rule 405 under the Securities Act (a "Free Writing Prospectus"), that the parties hereto shall hereafter expressly agree in writing to treat as part of the Disclosure Package.

1. Representations and Warranties. The Company represents and warrants to, and agrees with, each Underwriter as set forth below in this Section 1.

(a) The Company has prepared and filed with the SEC a registration statement (file number 333-253329) on Form S-1, including a related preliminary prospectus, for the registration of the offering and sale of the Securities under the Securities Act. Such Registration Statement, including any amendments thereto filed prior to the Execution Time, has become effective. The Company may have filed one or more amendments thereto, including a related preliminary prospectus, each of which has previously been furnished to you. The Company will file with the SEC a final prospectus relating to the Securities in accordance with Rule 424(b) after the Execution Time. As filed, such final prospectus shall contain all information required by the Securities Act and the rules thereunder and, except to the extent the Representatives shall agree in

writing to a modification, shall be in all substantive respects in the form furnished to you prior to the Execution Time or, to the extent not completed at the Execution Time, shall contain only such specific additional information and other changes (beyond that contained in the latest Preliminary Prospectus) as the Company has advised you, prior to the Execution Time, will be included or made therein.

(b) On the Effective Date, the Registration Statement did, and when the Prospectus is first filed in accordance with Rule 424(b) and on the Closing Date (as defined herein) and on any date on which Option Securities are purchased, if such date is not the Closing Date (a "Settlement Date"), the Prospectus (and any supplement thereto) will, comply in all material respects with the applicable requirements of the Securities Act and the rules thereunder; on the Effective Date, at the Execution Time and on the Closing Date, the Registration Statement did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading; and on the date of any filing pursuant to Rule 424(b) and on the Closing Date and any Settlement Date, the Prospectus (together with any supplement thereto) will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to the information contained in or omitted from the Registration Statement or the Prospectus (or any supplement thereto) in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Underwriter through the Representatives specifically for inclusion in the Registration Statement or the Prospectus (or any supplement thereto), it being understood and agreed that the only such information furnished by or on behalf of any Underwriter consists of the information described as such in Section 8 hereof.

(c) (i) The Disclosure Package and the price to the public, the number of Underwritten Securities and the number of Option Securities to be included on the cover page of the Prospectus, when taken together as a whole, (ii) each electronic road show, when taken together as a whole with the Disclosure Package and the price to the public, the number of Underwritten Securities and the number of Option Securities to be included on the cover page of the Prospectus, and (iii) any individual Written Testing-the-Waters Communication (as defined below), when taken together as a whole with the Disclosure Package and the price to the public, the number of Underwritten Securities and the number of Option Securities to be included on the cover page of the Prospectus, does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from the Disclosure Package based upon and in conformity with written information furnished to the Company by or on behalf of any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by or on behalf of any Underwriter consists of the information described as such in Section 8 hereof.

(d) (i) At the time of filing the Registration Statement and (ii) as of the Execution Time (with such date being used as the determination date for purposes of this clause (ii)), the Company was not and is not an Ineligible Issuer (as defined in Rule 405 under the Securities Act ("Rule 405")), without taking account of any determination by the SEC pursuant to Rule 405 that it is not necessary that the Company be considered an Ineligible Issuer.

(e) From the time of initial confidential submission of the Registration Statement to the SEC (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) through the Execution Time, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "Emerging Growth Company"). "Testing-the-Waters Communication" means any oral or written communication by the Company or by any person authorized to act on its behalf, with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(f) The Company (i) has not alone engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are accredited investors within the meaning of Rule 501 under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule III hereto. "Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405.

(g) Each Issuer Free Writing Prospectus does not include any information that conflicts with the information contained in the Registration Statement, including any document incorporated by reference therein that has not been superseded or modified. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by or on behalf of any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by or on behalf of any Underwriter consists of the information described as such in Section 8 hereof.

(h) The Company's authorized equity capitalization is as set forth in the Disclosure Package and the Prospectus as of the date stated therein; the capital stock of the Company conforms in all respects to the description thereof contained in the Disclosure Package and the Prospectus as of the date stated therein; the outstanding shares of Common Stock have been duly and validly authorized and issued and are fully paid and nonassessable; the Securities have been duly and validly authorized and, when issued and delivered to and paid for by the Underwriters pursuant to this Agreement, will be fully paid and nonassessable; the Securities in book-entry form are in valid and sufficient form; the holders of outstanding shares of capital stock of the Company are not

entitled to preemptive or other rights to subscribe for the Securities, except for any such rights as have been effectively waived; and, except as set forth in the Disclosure Package and the Prospectus, no options, warrants or other rights to purchase, agreements or other obligations to issue, or rights to convert any obligations into or exchange any securities for, shares of capital stock of or ownership interests in the Company are outstanding.

(i) Each of the Company and its subsidiaries has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction in which it is incorporated with the requisite corporate power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as described in the Disclosure Package and the Prospectus, and is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction which requires such qualification, except where the failure to so qualify or be in good standing would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect (as defined below).

(j) All the outstanding shares of capital stock of each subsidiary have been duly and validly authorized and issued and are fully paid and non-assessable (to the extent applicable under the relevant jurisdiction of incorporation or organization), and, except as otherwise set forth in the Disclosure Package and the Prospectus, all outstanding shares of capital stock of the subsidiaries are owned by the Company either directly or through wholly owned subsidiaries free and clear of any perfected security interest or any other security interests, claims, liens or encumbrances.

(k) There is no franchise, contract or other document of a character required to be described in the Registration Statement or Prospectus, or to be filed as an exhibit thereto, which is not described or filed as required (and the Preliminary Prospectus contains in all material respects the same description of the foregoing matters contained in the Prospectus); and the statements in the Preliminary Prospectus and the Prospectus under the headings “Material U.S. Federal Income Tax Consequences to Non-U.S. Holders,” “Risk Factors—Risks Related to Regulatory Compliance,” “Risk Factors—Risks Related to Our Intellectual Property,” “Business—License Agreement with Arena,” “Business—Services Agreement with Arena,” “Business—Intellectual Property,” “Business—Government Regulation and Product Approval,” “Description of Capital Stock” and “Shares Eligible for Future Sale,” insofar as such statements purport to summarize legal matters, agreements, documents or proceedings discussed therein, fairly present, in all material respects, summaries of such legal matters, agreements, documents or proceedings.

(l) This Agreement has been duly authorized, executed and delivered by the Company.

(m) The Company is not and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Disclosure Package and the Prospectus, will not be an “investment company” as defined in the Investment Company Act of 1940, as amended.

(n) No consent, approval, authorization, filing with or order of any court or governmental agency or body is required in connection with the transactions contemplated herein, except such as have been obtained under the Securities Act and such as may be required under the blue sky laws of any jurisdiction in connection with the purchase and distribution of the Securities by the Underwriters in the manner contemplated herein and in the Disclosure Package and the Prospectus.

(o) Neither the issue and sale of the Securities nor the consummation of any other of the transactions herein contemplated nor the fulfillment of the terms hereof will conflict with, result in a breach or violation of, or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, (i) the charter or bylaws of the Company or any of its subsidiaries, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which the Company or any of its subsidiaries is a party or bound or to which its or their property is subject, or (iii) any statute, law, rule, regulation, judgment, order or decree applicable to the Company or any of its subsidiaries of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its subsidiaries or any of its or their properties, except in the case of clauses (ii) and (iii) for any such breach, violation or imposition as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.

(p) No holders of securities of the Company have rights to the registration of such securities under the Registration Statement, except for persons and entities who have expressly waived such right in writing.

(q) The historical financial statements and schedules of the Company included in the Preliminary Prospectus, the Prospectus and the Registration Statement present fairly in all material respects the financial condition, results of operations and cash flows of the Company as of the dates and for the periods indicated, comply as to form in all material respects with the applicable accounting requirements of the Securities Act and have been prepared in conformity with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as otherwise noted therein).

(r) No action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries or its or their property is pending or, to the best knowledge of the Company, threatened that (i) would reasonably be expected to have, individually or in the aggregate, a material adverse effect on the performance of this Agreement or the consummation of any of the transactions contemplated hereby or (ii) would reasonably be expected to have a material adverse effect on the condition (financial or otherwise), prospects, earnings, business or properties of the Company and its subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business (a "Material Adverse Effect"), except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(s) Each of the Company and each of its subsidiaries owns or leases all such properties as are necessary to the conduct of its operations as presently conducted, except as would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(t) Neither the Company nor any of its subsidiaries is in violation or default of (i) any provision of its charter or bylaws, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which it is a party or bound or to which its property is subject, or (iii) any statute, law, rule, regulation, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or such subsidiary or any of its properties, as applicable, except in the case of clauses (ii) and (iii) for any such violation or default as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

(u) KPMG LLP, who has certified certain financial statements of the Company and its consolidated subsidiaries and delivered its report with respect to the audited consolidated financial statements and schedules included in the Disclosure Package and the Prospectus, is an independent registered public accounting firm with respect to the Company within the meaning of the Securities Act and the applicable published rules and regulations thereunder.

(v) There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Securities.

(w) The Company has filed all tax returns that are required to be filed by it or has requested extensions thereof (except in any case in which the failure to so file would not have a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto)) and has paid all taxes required to be paid by it and any other assessment, fine or penalty levied against it, to the extent that any of the foregoing is due and payable, except for any such assessment, fine or penalty that is currently being contested in good faith or as would not have a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(x) There is no tax deficiency that has been asserted against the Company or any of its properties or assets, except as would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. No labor problem or dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries' principal suppliers, contractors or customers, that would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(y) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as the Company believes are prudent and customary in the businesses in which they are engaged; all policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or their respective businesses, assets, employees, officers and directors are in full force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and there are no material claims by the Company or any of its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; neither the Company nor any such subsidiary has been refused any insurance coverage sought or applied for; and neither the Company nor any such subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(z) No subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such subsidiary's capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary's property or assets to the Company or any other subsidiary of the Company, except as described in or contemplated by the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(aa) The Company and its subsidiaries possess all licenses, certificates, permits and other authorizations issued by all applicable authorities necessary to conduct their respective businesses, except for any such failure to possess as would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; and neither the Company nor any such subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(bb) The Company and each of its subsidiaries maintain a system of internal accounting controls designed to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and its subsidiaries' internal controls over financial reporting are effective and the Company and its subsidiaries are not aware of any material weakness in their internal controls over financial reporting.

(cc) The Company and its subsidiaries maintain "disclosure controls and procedures" (as such term is defined in Rule 13a-15(e) under the Securities and Exchange Act 1934, as amended, and the rules and regulations promulgated thereunder (the "Exchange Act"); such disclosure controls and procedures are effective.

(dd) The Company has not taken, directly or indirectly (without giving effect to the activities of the Underwriters), any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the Exchange Act or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(ee) The Company and its subsidiaries are (i) in compliance with any and all applicable foreign, U.S. federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) have received and are in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) have not received notice of any actual or potential liability under any Environmental Law, except where such non-compliance with Environmental Laws, failure to receive required permits, licenses or other approvals, or liability would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto). Except as set forth in the Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has been named as a "potentially responsible party" under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(ff) In the ordinary course of its business, the Company periodically reviews the effect of Environmental Laws on the business, operations and properties of the Company and its subsidiaries, in the course of which it identifies and evaluates associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws, or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such review, the Company has concluded that such associated costs and liabilities would not reasonably be expected to, singly or in the aggregate, have a Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(gg) Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in the Registration Statement, the Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects, and, to the extent required by such sources, the Company has obtained the written consent to the use of such data from such sources.

(hh) None of the following events has occurred or exists: (i) a failure to fulfill the obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and the regulations and published interpretations thereunder with respect to a Plan (as defined below), determined without regard to any waiver of such obligations or extension of any amortization period, which such failure would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; (ii) an audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other federal or state governmental agency or any foreign regulatory agency with respect to the employment or compensation of employees by any of the Company or any of its subsidiaries that would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; (iii) any breach of any contractual obligation, or any violation of law or applicable qualification standards, with respect to the employment or compensation of employees by the Company or any of its subsidiaries that would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. None of the following events has occurred or is reasonably likely to occur: (i) a material increase in the aggregate amount of contributions required to be made to all Plans in the current fiscal year of the Company and its subsidiaries compared to the amount of such contributions made in the most recently completed fiscal year of the Company and its subsidiaries, other than increases in the ordinary course resulting from an increase in the number of eligible participants in such Plans or increase resulting from increased participation by eligible participants, in such Plans; (ii) a material increase in the "accumulated post-retirement benefit obligations" (within the meaning of Statement of Financial Accounting Standards 106) of the Company and its subsidiaries compared to the amount of such obligations in the most recently completed fiscal year of the Company and its subsidiaries; (iii) any event or condition giving rise to a liability under Title IV of ERISA that would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; or (iv) the filing of a claim by one or more employees or former employees of the Company or any of its subsidiaries related to their employment that would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. For purposes of this paragraph, the term "Plan" means a plan (within the meaning of Section 3(3) of ERISA) subject to Title IV of ERISA with respect to which the Company or any of its subsidiaries may have any liability.

(ii) There is and has been no failure on the part of the Company and any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated in connection thereunder (the "Sarbanes-Oxley Act"), including Section 402 relating to loans and Sections 302 and 906 relating to certifications, that are then in effect and with which the Company is required to comply with as of the Effective Date.

(jj) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would reasonably be expected to result in a violation or a sanction for violation by such persons of the Foreign Corrupt Practices Act of 1977 or the U.K. Bribery Act 2010, each as may be amended, or similar applicable anti-corruption law of any other relevant jurisdiction, or the rules or regulations thereunder; and the Company and its subsidiaries have instituted and maintain policies and procedures to ensure compliance therewith. No part of the proceeds of the offering will be used, directly or, to the knowledge of the Company, indirectly, in violation of the Foreign Corrupt Practices Act of 1977 or the U.K. Bribery Act 2010, each as may be amended, or similar law of any other relevant jurisdiction, or the rules or regulations thereunder.

(kk) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements and the money laundering statutes and the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(ll) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries (i) is, or is controlled or more than 50% owned in the aggregate by or is acting on behalf of, one or more individuals or entities that are currently the subject of any sanctions administered or enforced by the United States (including any administered or enforced by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State or the Bureau of Industry and Security of the U.S. Department of Commerce), the United Nations Security Council, the European Union, a member state of the European Union (including sanctions administered or enforced by Her Majesty's Treasury of the United Kingdom) or other relevant sanctions authority (collectively, "Sanctions" and such persons, "Sanctioned Persons" and each such person, a "Sanctioned Person"), (ii) is located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions that broadly prohibit dealings with that country or territory (collectively, "Sanctioned Countries" and each, a "Sanctioned Country") or (iii) will, directly or indirectly, use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other individual or entity in any manner that would result in a violation of any Sanctions by, or would reasonably be expected to result in the imposition of Sanctions against, any individual or entity (including any individual or entity participating in the offering, whether as an underwriter, advisor, investor or otherwise).

(mm) Neither the Company nor any of its subsidiaries has engaged in any dealings or transactions with or for the benefit of a Sanctioned Person, or with or in a Sanctioned Country, since January 3, 2020 (the Company's inception), nor does the Company or any of its subsidiaries have any plans to engage in dealings or transactions with or for the benefit of a Sanctioned Person, or with or in a Sanctioned Country.

(nn) Except as described in the Registration Statement, the Disclosure Package and the Prospectus, the Company and its subsidiaries own, or have obtained valid and enforceable licenses for, the inventions, patent applications, patents, trademarks, trade names, service names, copyrights, trade secrets and other intellectual property described in the Registration Statement, Disclosure Package and the Prospectus as being owned or licensed by them or which are necessary for the conduct of their respective businesses as currently conducted or as currently proposed to be conducted in the Registration Statement, Disclosure Package and the Prospectus (collectively, "Intellectual Property"). To the Company's knowledge, except as described in the Registration Statement, the Disclosure Package and the Prospectus: (i) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement, Disclosure Package and the Prospectus as licensed to the Company or any of its subsidiaries, and the Company and each of its subsidiaries have taken all reasonable steps necessary to secure their respective interests in the Intellectual Property from their respective employees and contractors; (ii) there is no infringement by third parties of any Intellectual Property; (iii) neither the Company nor any of its subsidiaries is infringing the intellectual property rights of third parties; (iv) each of the Company and its subsidiaries is the sole owner of the Intellectual Property owned by it and has the valid right to use the Intellectual Property; and (v) no employee of the Company or any of its subsidiaries is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or such subsidiary. Except as described in the Registration Statement, the Disclosure Package and the Prospectus, there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company's or any of its subsidiaries' rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that the Company or any of its subsidiaries infringes or otherwise violates, or would, upon the commercialization of any product or service described in the Registration Statement, Disclosure Package and the Prospectus as under development, infringe, misappropriate or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company and each of its subsidiaries have complied with the material terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or such subsidiary, and all such agreements are in full force and effect. The product candidates described in the Registration Statement, Disclosure Package and the Prospectus as under development by the Company fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company or its subsidiaries.

(oo) All patents and patent applications owned by or exclusively licensed to the Company or its subsidiaries or under which the Company or any of its subsidiaries has rights have, to the knowledge of the Company, been duly and properly filed and each issued patent is being diligently maintained; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the U.S. Patent and Trademark Office (the "USPTO") in connection with such applications; to the Company's knowledge, there is no patent or patent application that contains claims that dominate or may dominate (as such term is described in 35 U.S.C. §135 and 37 C.F.R. 41.100 to 41.208) the issued or pending claims of any of the Intellectual Property of the Company or any of its subsidiaries; to the Company's knowledge, there is no prior art material to any patent or patent application of the Intellectual Property of the Company or its subsidiaries that may render any U.S. patent held by the Company or its subsidiaries invalid or any U.S. patent application held by the Company or any of its subsidiaries unpatentable; and the Company is not aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or would reasonably be expected to form the basis of a finding of invalidity with respect to any patents that have been issued with respect to such applications.

(pp) Except as described in the Registration Statement, Disclosure Package and the Prospectus, each of the Company and its subsidiaries: (i) has operated and currently operates its business in compliance in all material respects with all applicable Health Care Laws (as defined below) and any other applicable requirements of the Food and Drug Administration ("FDA"), the Department of Health and Human Services ("HHS") and any comparable foreign or other regulatory authority to which they are subject (collectively, the "Applicable Regulatory Authorities") applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any of the Company's product candidates; (ii) has not received any FDA Form 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any court or arbitrator or governmental or regulatory authority alleging or asserting non-compliance with (A) any Health Care Laws or (B) or any licenses, certificates, approvals, clearances, exemptions, registrations, authorizations, permits and supplements or amendments thereto required by any such Health Care Laws ("Regulatory Authorizations"); (iii) possesses all Regulatory Authorizations required to conduct its business as currently conducted and such Regulatory Authorizations are valid and in full force and effect and neither the Company nor any of its subsidiaries are in violation, in any material respect, of any term of any such Regulatory Authorizations; (iv) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the Applicable Regulatory Authorities or any other third party alleging that any product operation or activity is in material violation of any Health Care Laws or Regulatory Authorizations and has no knowledge that the Applicable Regulatory Authorities or any other third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) has not received notice that any of the Applicable Regulatory Authorities has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Regulatory Authorizations and has no knowledge that any

of the Applicable Regulatory Authorities is considering such action; (vi) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws or Regulatory Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were materially corrected or supplemented by a subsequent submission); (vii) is not a party to or have any ongoing reporting obligations pursuant to any corporate integrity agreements, deferred or non-prosecution agreements, monitoring agreements, consent decrees, settlement orders, plans of correction or similar agreements with or imposed by any Applicable Regulatory Authority; and (viii) along with its employees, officers and directors, and, to the Company's knowledge, agents, has not been excluded, suspended or debarred from participation in any government health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that would reasonably be expected to result in debarment, suspension, or exclusion. The term "Health Care Laws" means Title XVIII of the Social Security Act, 42 U.S.C. §§ 1395-1395hhh (the Medicare statute); Title XIX of the Social Security Act, 42 U.S.C. §§ 1396-1396v (the Medicaid statute); the Federal Anti-Kickback Statute, 42 U.S.C. § 1320a-7b(b); the civil False Claims Act, 31 U.S.C. §§ 3729 et seq.; the criminal False Claims Act 42 U.S.C. 1320a-7b(a); any criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286, 287, 1347 and 1349 and the health care fraud criminal provisions under the Health Insurance Portability and Accountability Act of 1996, 42 U.S.C. §§ 1320d et seq., ("HIPAA"); the Civil Monetary Penalties Law, 42 U.S.C. §§ 1320a-7a and 1320a-7b; the Physician Payments Sunshine Act, 42 U.S.C. § 1320a-7h; the Exclusion Laws, 42 U.S.C. § 1320a-7; HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, 42 U.S.C. §§ 17921 et seq.; the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301 et seq.; the Public Health Service Act, 42 U.S.C. §§ 201 et seq.; the regulations promulgated pursuant to such laws; and any similar federal, state and local laws and regulations.

(qq) To the Company's knowledge, the manufacturing facilities and operations of its suppliers and its subsidiaries' suppliers are operated in compliance in all material respects with all applicable statutes, rules, regulations and policies of the Applicable Regulatory Authorities.

(rr) None of the Company's product candidates have received marketing approval from any Applicable Regulatory Authority. All clinical and pre-clinical studies and trials conducted by or on behalf of or sponsored by the Company or its subsidiaries, or in which the Company or its subsidiaries has participated with respect to the Company's product candidates, including without limitation any such studies and trials that are described in the Registration Statement, Disclosure Package and the Prospectus, or the results of which are referred to in the Registration Statement, Disclosure Package and the Prospectus, as applicable (collectively, "Company Trials"), were, and if still pending are, being conducted in all material respects in accordance with all applicable Health Care Laws, standard medical and scientific research procedures and any applicable rules, regulations and policies of the jurisdiction in which such trials and

studies are being conducted; the descriptions in the Registration Statement, Disclosure Package and the Prospectus of the results of any Company Trials are accurate and complete descriptions in all material respects and fairly present the data derived therefrom; the Company has no knowledge of any other studies or trials not described in the Registration Statement, Disclosure Package and the Prospectus, the results of which are inconsistent with or call into question the results described or referred to in the Registration Statement, Disclosure Package and the Prospectus; the Company and each of its subsidiaries have operated at all times and are currently in compliance in all material respects with all applicable Health Care Laws; neither the Company nor any of its subsidiaries has received, and neither the Company nor any of its subsidiaries have knowledge after due inquiry that any of their respective collaboration partners have received, any written notices, correspondence or other communications from the Applicable Regulatory Authorities or any other governmental entity requiring or threatening the termination, material modification or suspension of Company Trials, other than ordinary course communications with respect to modifications in connection with the design and implementation of such studies or trials, and, to the Company's knowledge, there are no reasonable grounds for the same. No investigational new drug application or comparable submission filed by or on behalf of the Company or any of its subsidiaries with the FDA has been terminated or suspended by the FDA or any other Applicable Regulatory Authority. The Company has obtained (or caused to be obtained) informed consent by or on behalf of each human subject who participated in a Company Trial. In using or disclosing patient information received by the Company or any of its subsidiaries in connection with a Company Trial, the Company or such subsidiary has complied in all material respects with all applicable laws and regulatory rules or requirements, including, without limitation, HIPAA and the rules and regulations thereunder. To the Company's knowledge, none of the Company Trials involved any investigator who has been disqualified as a clinical investigator or has been found by the FDA to have engaged in scientific misconduct.

(ss) (i) Except as may be included in the Registration Statement, the Disclosure Package and the Prospectus, (x) to the Company's knowledge, there has been no material security breach or other material compromise of or relating to any of the Company's or its subsidiaries' information technology and computer systems, networks, hardware, software, data (including the data of their respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of them), equipment or technology (collectively, "IT Systems and Data") and (y) the Company and its subsidiaries have not been notified of, and have no knowledge of any event or condition that would reasonably be expected to result in, any material security breach or other material compromise to their IT Systems and Data; (ii) the Company and its subsidiaries have implemented appropriate controls, policies, procedures, and technological safeguards to maintain and protect the integrity, continuous operation, redundancy and security of their IT Systems and Data reasonably consistent with industry standards and practices, or as required by applicable laws and regulatory standards; (iii) the Company and its subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, policies and contractual obligations relating to the

privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, in the case of this clause (iii), individually or in the aggregate, have a Material Adverse Effect; and (iv) the Company and its subsidiaries have implemented backup and disaster recovery technology consistent with industry standards and practices.

(tt) Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities hereunder to repay any outstanding debt owed to any affiliate of any Underwriter.

Any certificate signed by any officer of the Company and delivered to the Representatives or counsel for the Underwriters in connection with the offering of the Securities shall be deemed a representation and warranty by the Company, as to matters covered thereby, to each Underwriter.

2. Purchase and Sale.

(a) Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Company agrees to sell to each Underwriter, and each Underwriter agrees, severally and not jointly, to purchase from the Company, at a purchase price of $[•] per share, the amount of the Underwritten Securities set forth opposite such Underwriter's name in Schedule I hereto.

(b) Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to [•] Option Securities at the same purchase price per share as the Underwriters shall pay for the Underwritten Securities, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Underwritten Securities but not payable on the Option Securities. Said option may be exercised only to cover over-allotments in the sale of the Underwritten Securities by the Underwriters. Said option may be exercised in whole or in part at any time on or before the 30th day after the date of the Prospectus upon written or telegraphic notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are exercising the option and the Settlement Date. The number of Option Securities to be purchased by each Underwriter shall be the same percentage of the total number of Option Securities to be purchased by the several Underwriters as such Underwriter is purchasing of the Underwritten Securities, subject to such adjustments as you in your absolute discretion shall make to eliminate any fractional shares.

3. Delivery and Payment. Delivery of and payment for the Underwritten Securities and the Option Securities (if the option provided for in Section 2(b) hereof shall have been exercised on or before the first Business Day (as defined below) immediately preceding the Closing Date) shall be made at 10:00 AM, New York City time, on [•], 2021, or at such time on such later date not more than three Business Days after the foregoing date as the Representatives

shall designate, which date and time may be postponed by agreement between the Representatives and the Company or as provided in Section 9 hereof (such date and time of delivery and payment for the Securities being herein called the "Closing Date"). As used herein, "Business Day" shall mean any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies are authorized or obligated by law to close in New York City. Delivery of the Securities shall be made to the Representatives for the respective accounts of the several Underwriters against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. Delivery of the Underwritten Securities and the Option Securities shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

If the option provided for in Section 2(b) hereof is exercised after the first Business Day immediately preceding the Closing Date, the Company will deliver the Option Securities (at the expense of the Company) to the Representatives, at Citigroup Global Markets Inc., 388 Greenwich Street, New York, New York 10013, on the date specified by the Representatives (which shall be within three Business Days after exercise of said option) for the respective accounts of the several Underwriters, against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. If settlement for the Option Securities occurs after the Closing Date, the Company will deliver to the Representatives on the Settlement Date for the Option Securities, and the obligation of the Underwriters to purchase the Option Securities shall be conditioned upon receipt of, supplemental opinions, certificates and letters confirming as of such date the opinions, certificates and letters delivered on the Closing Date pursuant to Section 6 hereof.

4. Offering by Underwriters. It is understood that the several Underwriters propose to offer the Securities for sale to the public as set forth in the Prospectus.

5. Agreements. The Company agrees with the several Underwriters that:

(a) Prior to the termination of the offering of the Securities, the Company will not file any amendment to the Registration Statement or supplement to the Prospectus or any Rule 462(b) Registration Statement unless the Company has furnished you a copy for your review prior to filing and will not file any such proposed amendment or supplement to which you reasonably object. The Company will cause the Prospectus, properly completed, and any supplement thereto to be filed in a form approved by the Representatives with the SEC pursuant to the applicable paragraph of Rule 424(b) within the time period prescribed and will provide evidence satisfactory to the Representatives of such timely filing. The Company will promptly advise the Representatives (i) when the Prospectus, and any supplement thereto, shall have been filed (if required) with the SEC pursuant to Rule 424(b) or when any Rule 462(b) Registration Statement shall have been filed with the SEC, (ii) when, prior to termination of the offering of the Securities, any amendment to the Registration Statement shall have been filed or become effective, (iii) of any request by the SEC or its staff for any amendment to the Registration Statement, or any Rule 462(b) Registration Statement, or for any supplement to the Prospectus or for any additional information, (iv) of the issuance by the SEC of any stop

order suspending the effectiveness of the Registration Statement or of any notice objecting to its use or the institution or threatening of any proceeding for that purpose and (v) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Securities for sale in any jurisdiction or the institution or threatening of any proceeding for such purpose. The Company will use its reasonable best efforts to prevent the issuance of any such stop order or the occurrence of any such suspension or objection to the use of the Registration Statement and, upon such issuance, occurrence or notice of objection, to obtain as soon as possible the withdrawal of such stop order or relief from such occurrence or objection, including, if necessary, by filing an amendment to the Registration Statement or a new registration statement and using its reasonable best efforts to have such amendment or new registration statement declared effective as soon as practicable.

(b) If, at any time prior to the filing of the Prospectus pursuant to Rule 424(b), any event occurs as a result of which the Disclosure Package would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein in the light of the circumstances under which they were made or the circumstances then prevailing not misleading, the Company will (i) notify promptly the Representatives so that any use of the Disclosure Package may cease until it is amended or supplemented; (ii) amend or supplement the Disclosure Package to correct such statement or omission; and (iii) supply any amendment or supplement to you in such quantities as you may reasonably request.

(c) If, at any time when a prospectus relating to the Securities is required to be delivered under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act ("Rule 172")), any event occurs as a result of which the Prospectus as then supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein in the light of the circumstances under which they were made or the circumstances then prevailing not misleading, or if it shall be necessary to amend the Registration Statement or supplement the Prospectus to comply with the Securities Act or the rules thereunder, the Company promptly will (i) notify the Representatives of any such event; (ii) prepare and file with the SEC, subject to the second sentence of paragraph (a) of this Section 5, an amendment or supplement which will correct such statement or omission or effect such compliance; and (iii) supply any supplemented Prospectus to you in such quantities as you may reasonably request.

(d) As soon as practicable, the Company will make generally available to its security holders and to the Representatives an earnings statement or statements of the Company and its subsidiaries which will satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 under the Securities Act.

(e) Upon request, the Company will furnish to the Representatives and counsel for the Underwriters, without charge, signed copies of the Registration Statement (including exhibits thereto) and to each other Underwriter a copy of the Registration Statement (without exhibits thereto) and, so long as delivery of a prospectus by an Underwriter or dealer may be required by the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172), as many copies of each Preliminary Prospectus, the Prospectus and each Issuer Free Writing Prospectus and any supplement thereto as the Representatives may reasonably request. The Company will pay the expenses of printing or other production of all documents relating to the offering.

(f) The Company will use its reasonable best efforts to arrange, if necessary, for the qualification of the Securities for sale under the laws of such jurisdictions as the Representatives may reasonably designate and will maintain such qualifications in effect so long as required for the distribution of the Securities; provided that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits, other than those arising out of the offering or sale of the Securities, in any jurisdiction where it is not now so subject.

(g) The Company will not, without the prior written consent of the Representatives, offer, sell, contract to sell, pledge, or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Company or any affiliate of the Company or any person in privity with the Company or any affiliate of the Company) directly or indirectly, including the filing (or participation in the filing) of a registration statement with the SEC in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, any other shares of Common Stock or any securities convertible into, or exercisable, or exchangeable for, shares of Common Stock; or publicly announce an intention to effect any such transaction, for a period of 180 days after the date of this Agreement, provided, however, that the Company may: (i) effect the transactions contemplated hereby, (ii) issue and sell shares of Common Stock, or any securities convertible into or exercisable or exchangeable for shares of Common Stock, pursuant to any employee stock option plan, incentive plan, employee stock purchase plan, stock bonus plan, stock ownership plan or dividend reinvestment plan or other plan or arrangement of the Company described in the Registration Statement, the Disclosure Package and the Prospectus (collectively, the "Company Plans"), (iii) issue shares of Common Stock issuable upon the conversion of securities or the exercise of warrants or options or the settlement of restricted stock units outstanding at the Execution Time or issued thereafter pursuant to a Company Plan, (iv) file one or more registration statements on Form S-8 relating to any Company Plan, (v) issue shares of Common Stock, or any securities convertible into or exercisable or exchangeable for shares of Common Stock pursuant to an arrangement of the Company described in the Registration Statement, the Disclosure Package and the Prospectus; and (vi) issue shares of Common Stock, or any securities convertible into or exercisable or exchangeable for shares of Common Stock, or enter into an agreement to issue shares of Common Stock, or any securities convertible into or exercisable or exchangeable for shares of Common Stock, in connection with any bona fide merger, joint venture, strategic alliance, commercial or other collaborative transaction, or the acquisition or license of the business, property, technology or other assets of another individual or entity, or the assumption of an employee benefit plan in connection with such a merger or acquisition, provided, however, that the aggregate number of shares of

Common Stock, or securities convertible into or exercisable or exchangeable for shares of Common Stock, that the Company may issue or agree to issue pursuant to this clause (v) shall not exceed 10.0% of the total outstanding shares of Common Stock immediately following the issuance of the Underwritten Securities, and provided, further, that the recipients of such securities issued pursuant to clauses (ii)-(v) provide to the Representatives a signed lock-up agreement in the form described in Section 6(i) hereof.

(h) If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up letter described in Section 6(k) hereof for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three Business Days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit B hereto through a major news service at least two Business Days before the effective date of the release or waiver.

(i) The Company will not take, directly or indirectly (without giving effect to activities by the Underwriters), any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the Exchange Act or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(j) The Company agrees to pay the costs and expenses relating to the following matters: (i) the preparation, printing or reproduction and filing with the SEC of the Registration Statement (including financial statements and exhibits thereto), each Preliminary Prospectus, the Prospectus and each Issuer Free Writing Prospectus, and each amendment or supplement to any of them; (ii) the printing (or reproduction) and delivery (including postage, air freight charges and charges for counting and packaging) of such copies of the Registration Statement, each Preliminary Prospectus, the Prospectus and each Issuer Free Writing Prospectus, and all amendments or supplements to any of them, as may, in each case, be reasonably requested for use in connection with the offering and sale of the Securities; (iii) the preparation, printing, authentication, issuance and delivery of certificates for the Securities, including any stamp or transfer taxes in connection with the original issuance and sale of the Securities; (iv) the printing (or reproduction) and delivery of this Agreement, any blue sky memorandum and all other agreements or documents printed (or reproduced) and delivered in connection with the offering of the Securities; (v) the registration of the Securities under the Exchange Act and the listing of the Securities on the Nasdaq Global Market ("Nasdaq"); (vi) any registration or qualification of the Securities for offer and sale under the securities or blue sky laws of the several states (including filing fees and the reasonable fees and expenses of counsel for the Underwriters relating to such registration and qualification); (vii) any filings required to be made with the Financial Industry Regulatory Authority, Inc. ("FINRA") (including filing fees and the reasonable fees and expenses of counsel for the Underwriters relating to such filings); (viii) the transportation and other expenses incurred by or on behalf of Company representatives in connection with presentations to prospective purchasers of the Securities; (ix) the fees and expenses of the Company's accountants and the fees and expenses of counsel (including local and special counsel) for the Company; and (x) all other costs and expenses incident to the performance by the Company of its obligations hereunder; provided, however, that the reasonable fees and expenses of counsel for the Underwriters incurred pursuant clauses (vi) and (vii) of this Section 5(j) shall not exceed $40,000 in the aggregate.

(k) The Company agrees that, unless it has or shall have obtained the prior written consent of the Representatives, and each Underwriter, severally and not jointly, agrees with the Company that, unless it has or shall have obtained, as the case may be, the prior written consent of the Company, it has not made and will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a Free Writing Prospectus required to be filed by the Company with the SEC or retained by the Company under Rule 433 under the Securities Act ("Rule 433"); provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the Free Writing Prospectuses included in Schedule II hereto. Any such free writing prospectus consented to by the Representatives or the Company is hereinafter referred to as a "Permitted Free Writing Prospectus." The Company agrees that (i) it has treated and will treat, as the case may be, each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus and (ii) it has complied and will comply, as the case may be, with the requirements of Rule 164 under the Securities Act ("Rule 164") and Rule 433 applicable to any Permitted Free Writing Prospectus, including in respect of timely filing with the SEC, legending and record keeping.

(l) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (a) completion of the distribution of the Securities within the meaning of the Securities Act and (b) completion of the 180-day restricted period referred to in Section 5(g) hereof.

(m) If at any time following the distribution of any Written Testing-the-Waters Communication, any event occurs as a result of which such Written Testing-the-Waters Communication would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein in the light of the circumstances under which they were made or the circumstances then prevailing not misleading, the Company will (i) notify promptly the Representatives so that use of the Written Testing-the-Waters Communication may cease until it is amended or supplemented; (ii) amend or supplement the Written Testing-the-Waters Communication to correct such statement or omission; and (iii) supply any amendment or supplement to the Representatives in such quantities as may be reasonably requested.

6. Conditions to the Obligations of the Underwriters. The obligations of the Underwriters to purchase the Underwritten Securities and the Option Securities, as the case may be, shall be subject to the accuracy of the representations and warranties on the part of the Company contained herein as of the Execution Time, the Closing Date and any Settlement Date pursuant to Section 3 hereof, to the accuracy of the statements of the Company made in any certificates pursuant to the provisions hereof, to the performance by the Company of its obligations hereunder and to the following additional conditions:

(a) The Prospectus, and any supplement thereto, have been filed in the manner and within the time period required by Rule 424(b); any material required to be filed by the Company pursuant to Rule 433(d) shall have been filed with the SEC within the applicable time periods prescribed for such filings by Rule 433; and no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use shall have been issued and no proceedings for that purpose shall have been instituted or threatened.

(b) The Company shall have requested and caused Cooley LLP, counsel for the Company, to have furnished to the Representatives its opinion and negative assurance letter, dated the Closing Date and addressed to the Representatives, in form and substance satisfactory to the Representatives.

(c) The Company shall have requested and caused Fish & Richardson P.C., intellectual property counsel for the Company, to have furnished to the Representatives its opinion, dated the Closing Date and addressed to the Representatives, in form and substance satisfactory to the Representatives.

(d) The Representatives shall have received from Latham & Watkins LLP, counsel for the Underwriters, such opinion or opinions, dated the Closing Date and addressed to the Representatives, with respect to the issuance and sale of the Securities, the Registration Statement, the Disclosure Package, the Prospectus (together with any supplement thereto) and other related matters as the Representatives may reasonably require, and the Company shall have furnished to such counsel such documents as they request for the purpose of enabling them to pass upon such matters.

(e) The Company shall have furnished to the Representatives a certificate of the Company, signed by the Chairperson of the Board or the President and the principal financial or accounting officer of the Company, dated the Closing Date, to the effect that the signers of such certificate have carefully examined the Registration Statement, the Disclosure Package, the Prospectus and any amendment or supplement thereto, as well as each electronic road show used in connection with the offering of the Securities, and this Agreement and that:

(i) the representations and warranties of the Company in this Agreement are true and correct on and as of the Closing Date with the same effect as if made on the Closing Date and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the Closing Date;

(ii) no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use has been issued and no proceedings for that purpose have been instituted or, to the Company's knowledge, threatened; and

(iii) since the date of the most recent financial statements included in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto), there has been no Material Adverse Effect, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(f) The Company shall have requested and caused KPMG LLP to have furnished to the Representatives, at the Execution Time and at the Closing Date, letters, dated respectively as of the Execution Time and as of the Closing Date, in form and substance satisfactory to the Representatives.

(g) Subsequent to the Execution Time or, if earlier, the dates as of which information is given in the Registration Statement (exclusive of any amendment thereof) and the Prospectus (exclusive of supplement thereto), there shall not have been (i) any change or decrease specified in the letter or letters referred to in paragraph (e) of this Section 6 or (ii) any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), earnings, business or properties of the Company and its subsidiaries taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto) the effect of which, in any case referred to in clause (i) or (ii) above, is, in the sole judgment of the Representatives, so material and adverse as to make it impractical or inadvisable to proceed with the offering or delivery of the Securities as contemplated by the Registration Statement (exclusive of any amendment thereof), the Disclosure Package and the Prospectus (exclusive of any amendment or supplement thereto).

(h) Prior to the Closing Date, the Company shall have furnished to the Representatives such further information, certificates and documents as the Representatives may reasonably request.

(i) Subsequent to the Execution Time, there shall not have been any decrease in the rating of any of the Company's debt securities by an "nationally recognized statistical rating organization" (as defined for purposes of Rule 3(a)(62) under the Exchange Act) or any notice given of any intended or potential decrease in any such rating or of a possible change in any such rating that does not indicate the direction of the possible change.

(j) The Securities shall have been listed and admitted and authorized for trading on Nasdaq, and satisfactory evidence of such actions shall have been provided to the Representatives.

(k) At or prior to the Execution Time, the Company shall have furnished to the Representatives a letter in the form of Exhibit A hereto from each officer and director of the Company and all holders of the Company's equity securities addressed to the Representatives.

If any of the conditions specified in this Section 6 shall not have been fulfilled when and as provided in this Agreement, or if any of the opinions and certificates mentioned above or elsewhere in this Agreement shall not be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters, this Agreement and all obligations of the Underwriters hereunder may be canceled at, or at any time prior to, the Closing Date by the Representatives. Notice of such cancellation shall be given to the Company in writing or by telephone, facsimile or electronic mail confirmed in writing.

The documents required to be delivered by this Section 6 shall be delivered at the office of Latham & Watkins LLP, counsel for the Underwriters, at 12670 High Bluff Drive, San Diego, California 92130, on the Closing Date.

7. Reimbursement of Underwriters' Expenses. If this Agreement is terminated because any condition to the obligations of the Underwriters set forth in Section 6 hereof is not satisfied, because of any termination pursuant to Section 10 hereof, or because of any refusal, inability or failure on the part of the Company to perform any agreement herein or comply with any provision hereof other than by reason of a default by any of the Underwriters, the Company will reimburse the Underwriters severally on demand for all documented out of pocket expenses (including reasonable fees and disbursements of counsel for the Underwriters) that shall have been incurred by them in connection with the proposed purchase and sale of the Securities.

8. Indemnification and Contribution.

(a) The Company agrees to indemnify and hold harmless each Underwriter, the directors, officers, employees, affiliates and agents of each Underwriter and each person who controls any Underwriter within the meaning of either the Securities Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Securities Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the registration statement for the registration of the Securities as originally filed or in any amendment thereof, or in any Preliminary Prospectus, or the Prospectus, any Issuer Free Writing Prospectus (including, for the avoidance of doubt, in any road show as defined in Rule 433(h) under the Securities Act), or any Written Testing-the-Waters Communication or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and agrees to reimburse each such indemnified party, as incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by or on behalf of any Underwriter through the Representatives specifically for inclusion therein. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter severally and not jointly agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signs the Registration Statement, and each person who controls the Company within the meaning of either the Securities Act or the Exchange Act, to the same extent as the foregoing indemnity from the Company to each Underwriter, but only with reference to written information relating to such Underwriter furnished to the Company by or on behalf of such Underwriter through the Representatives specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which any Underwriter may otherwise have. The Company acknowledges that the statements set forth (i) in the last paragraph of the cover page regarding delivery of the Securities and, under the heading "Underwriting," (ii) the list of Underwriters and their respective participation in the sale of the Securities and (iii) the paragraphs related to short sales, covering transactions and stabilizing transactions in the Preliminary Prospectus and the Prospectus constitute the only information furnished in writing by or on behalf of the several Underwriters for inclusion in the Preliminary Prospectus, the Prospectus or any Issuer Free Writing Prospectus.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party's choice at the indemnifying party's expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be satisfactory to the indemnified party. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest, (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior

written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) In the event that the indemnity provided in paragraph (a), (b) or (c) of this Section 8 is unavailable to or insufficient to hold harmless an indemnified party for any reason, the Company and the Underwriters severally agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending the same) (collectively, "Losses") to which the Company and one or more of the Underwriters may be subject in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and by the Underwriters on the other hand from the offering of the Securities. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Company and the Underwriters severally shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by the Company shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by it, and benefits received by the Underwriters shall be deemed to be equal to the total underwriting discounts and commissions, in each case as set forth on the cover page of the Prospectus. Relative fault shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Company on the one hand or the Underwriters on the other hand, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contribution were determined by pro rata allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Securities exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission Notwithstanding the provisions of this paragraph (d), no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 8, each person who controls an Underwriter within the meaning of either the Securities Act or the Exchange Act and each director, officer, employee, affiliate and agent of an Underwriter shall have the same rights to contribution as such Underwriter, and each person who controls the Company within the meaning of either the Securities Act or the Exchange Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to the applicable terms and conditions of this paragraph (d).

9. Default by an Underwriter. If any one or more Underwriters shall fail to purchase and pay for any of the Securities agreed to be purchased by such Underwriter or Underwriters hereunder and such failure to purchase shall constitute a default in the performance of its or their obligations under this Agreement, the remaining Underwriters shall be obligated severally to take up and pay for (in the respective proportions which the amount of Securities set forth opposite their names in Schedule I hereto bears to the aggregate amount of Securities set forth opposite the names of all the remaining Underwriters) the Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase; provided, however, that in the event that the aggregate amount of Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase shall exceed 10% of the aggregate amount of Securities set forth in Schedule I hereto, the remaining Underwriters shall have the right to purchase all, but shall not be under any obligation to purchase any, of the Securities, and if such non-defaulting Underwriters do not purchase all the Securities, this Agreement will terminate without liability to any non-defaulting Underwriter or the Company. In the event of a default by any Underwriter as set forth in this Section 9, the Closing Date shall be postponed for such period, not exceeding five Business Days, as the Representatives shall determine in order that the required changes in the Registration Statement and the Prospectus or in any other documents or arrangements may be effected. Nothing contained in this Agreement shall relieve any defaulting Underwriter of its liability, if any, to the Company and any non-defaulting Underwriter for damages occasioned by its default hereunder.

10. Termination. This Agreement shall be subject to termination in the absolute discretion of the Representatives, by notice given to the Company prior to delivery of and payment for the Securities, if at any time prior to such delivery and payment (i) trading in the Common Stock shall have been suspended by the SEC or Nasdaq or trading in securities generally on the New York Stock Exchange or Nasdaq shall have been suspended or limited or minimum prices shall have been established on either of such exchanges, (ii) a banking moratorium shall have been declared either by Federal or New York State authorities, (iii) there shall have occurred a material disruption in commercial banking or securities settlement or clearance services or (iv) there shall have occurred any outbreak or escalation of hostilities, declaration by the United States of a national emergency or war, or other calamity or crisis the effect of which on financial markets is such as to make it, in the sole judgment of the Representatives, impractical or inadvisable to proceed with the offering or delivery of the Securities as contemplated by the Preliminary Prospectus or the Prospectus (exclusive of any amendment or supplement thereto).

11. Representations and Indemnities to Survive. The respective agreements, representations, warranties, indemnities and other statements of the Company or its officers and of the Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or the Company or any of the officers, directors, employees, agents, affiliates or controlling persons referred to in Section 8 hereof, and will survive delivery of and payment for the Securities. The provisions of Sections 7 and 8 hereof shall survive the termination or cancellation of this Agreement.

12. Notices. All communications hereunder will be in writing and effective only on receipt, and, if sent to the Representatives, will be mailed, delivered or telefaxed to Citigroup Global Markets Inc. at 388 Greenwich Street, New York, New York 10013, Attention: General Counsel, facsimile number: +1 (646) 291-1469; Evercore Group L.L.C. at 55 East 52nd Street, New York, New York 10055, Attention: Ken Masotti, email address: masotti@evercore.com; Guggenheim Securities, LLC at 330 Madison Avenue, New York, New York 10017, Attention: James Lee, Senior Managing Director, with a copy to the General Counsel; Cantor Fitzgerald & Co. at 499 Park Avenue, New York, New York 10022, Attention: General Counsel, facsimile number: +1 (212) 829-4708); or, if sent to Longboard Pharmaceuticals, Inc., will be mailed, delivered or telefaxed to 6154 Nancy Ridge Drive, San Diego, California 92121, Attention: President and Chief Executive Officer.

13. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers, directors, employees, agents and controlling persons referred to in Section 8 hereof, and no other person will have any right or obligation hereunder.

14. Jurisdiction. The Company agrees that any suit, action or proceeding against the Company brought by any Underwriter, the directors, officers, employees, affiliates and agents of any Underwriter, or by any person who controls any Underwriter, arising out of or based upon this Agreement or the transactions contemplated hereby may be instituted in any State or U.S. federal court in The City of New York and County of New York, and waives any objection which it may now or hereafter have to the laying of venue of any such proceeding, and irrevocably submits to the non-exclusive jurisdiction of such courts in any suit, action or proceeding. The Company hereby appoints Kevin R. Lind at 6154 Nancy Ridge Drive, San Diego, California 92121 as its authorized agent (the "Authorized Agent") upon whom process may be served in any suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated herein that may be instituted in any State or U.S. federal court in The City of New York and County of New York, by any Underwriter, the directors, officers, employees, affiliates and agents of any Underwriter, or by any person who controls any Underwriter, and expressly accepts the non-exclusive jurisdiction of any such court in respect of any such suit, action or proceeding. The Company hereby represents and warrants that the Authorized Agent has accepted such appointment and has agreed to act as said agent for service of process, and the Company agrees to take any and all action, including the filing of any and all documents that may be necessary to continue such appointment in full force and effect as aforesaid. Service of process upon the Authorized Agent shall be deemed, in every respect, effective service of process upon the Company. Notwithstanding the foregoing, any action arising out of or based upon this Agreement may be instituted by any Underwriter, the directors, officers, employees, affiliates and agents of any Underwriter, or by any person who controls any Underwriter, in any court of competent jurisdiction in Delaware.

15. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

As used in this Section 15, "BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k); "Covered Entity" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b), (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b) or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b); "Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable; and "U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

16. No Fiduciary Duty. The Company hereby acknowledges that (a) the purchase and sale of the Securities pursuant to this Agreement is an arm's-length commercial transaction between the Company, on the one hand, and the Underwriters and any affiliate through which it may be acting, on the other hand, and do not constitute a recommendation, investment advice, or solicitation of any action by the Underwriters, (b) the Underwriters are acting as principal and not as an agent or fiduciary of the Company, (c) the Company's engagement of the Underwriters in connection with the offering of the Securities and the process leading up to the offering of the Securities is as independent contractors and not in any other capacity and (d) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice or solicitation of any action by the Underwriters with respect to any entity or natural person. Furthermore, the Company agrees that it is solely responsible for making its own judgments in connection with the offering of the Securities (irrespective of whether any of the Underwriters has advised or is currently advising the Company on related or other matters). The Company agrees that it will not claim that the Underwriters have rendered advisory services of any nature or respect, or owe an agency, fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

17. Integration. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Underwriters, or any of them, with respect to the subject matter hereof.

18. Applicable Law. This Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed within the State of New York.

19. Waiver of Jury Trial. The Company hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

20. Counterparts. This Agreement may be signed in one or more counterparts, including by facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com), each of which shall constitute an original and all of which together shall constitute one and the same agreement.

21. Headings. The section headings used herein are for convenience only and shall not affect the construction hereof.

[*Signature page follows*]

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicate hereof, whereupon this letter and your acceptance shall represent a binding agreement among the Company and the several Underwriters.

Very truly yours,

LONGBOARD PHARMACEUTICALS, INC.

By: _____
Name:
Title:

[*Signature Page to Underwriting Agreement*]

The foregoing Agreement is hereby confirmed and accepted as of the date first above written.

Citigroup Global Markets Inc.
Evercore Group L.L.C.
Guggenheim Securities, LLC
Cantor Fitzgerald & Co.

By: Citigroup Global Markets Inc.

By: _____
Name:
Title:

By: Evercore Group L.L.C.

By: _____
Name:
Title:

By: Guggenheim Securities, LLC

By: _____
Name:
Title:

By: Cantor Fitzgerald & Co.

By: _____
Name:
Title:

For themselves and the other several Underwriters named in Schedule I to the foregoing Agreement.

SCHEDULE I

Underwriters	Number of Underwritten Securities to be Purchased
Citigroup Global Markets Inc.	[●]
Evercore Group L.L.C.	[●]
Guggenheim Securities, LLC	[●]
Cantor Fitzgerald & Co.	[●]
Total	[●]

SCHEDULE II

Schedule of Free Writing Prospectuses included in the Disclosure Package

[*list all Free Writing Prospectuses included in the Disclosure Package*]

SCHEDULE III

Schedule of Written Testing-the-Waters Communication

[*list all Written Testing-the-Waters Communications*]

LONGBOARD PHARMACEUTICALS, INC.
Public Offering of Common Stock

, 2020

Citigroup Global Markets Inc.
Evercore Group L.L.C.
As Representatives of the several Underwriters

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

c/o Evercore Group L.L.C.
55 East 52nd Street
New York, New York 10055

Ladies and Gentlemen:

This letter agreement is being delivered to you in connection with the proposed underwriting agreement (the "Underwriting Agreement"), among Longboard Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and each of you as representatives (the "Representatives") of a group of Underwriters named therein (the "Underwriters"), relating to an underwritten public offering of Common Stock, $0.0001 par value (the "Common Stock"), of the Company (the "Offering").

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, the undersigned will not, without the prior written consent of each of the Representatives, offer, sell, contract to sell, pledge or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the undersigned or any affiliate of the undersigned or any person in privity with the undersigned or any affiliate of the undersigned), directly or indirectly, including the filing (or participation in the filing) of a registration statement with the Securities and Exchange Commission in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Securities and Exchange Commission promulgated thereunder with respect to, any shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock, or publicly announce an intention to effect any such transaction, for a period beginning on the date hereof and ending on, but including, the 180th day after the date of the Underwriting Agreement (the "Lock-Up Period"), subject to the exceptions set forth in this letter. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing restrictions shall be equally applicable to any issuer-directed shares of Common Stock the undersigned may purchase in the Offering.

The foregoing restrictions shall not apply to:

(a) if the undersigned is not an officer or director of the Company, the transfer of shares of Common Stock or other securities of the Company acquired in the Offering or in open market transactions on or after the completion of the Offering, provided that no filing by any party under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfers;

(b) transfers of Common Stock or other securities convertible into, or exercisable or exchangeable for shares of Common Stock owned by the undersigned:

(i) as a bona fide gift;

(ii) to any trust for the direct or indirect benefit of the undersigned or a family member (as defined below) of the undersigned, including by will or intestate succession; provided that any required filing under Section 16 of the Exchange Act reporting a change in beneficial ownership shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause, and no other public announcement shall be required or shall be made voluntarily in connection with such transfer;

(iii) to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which, in each case, are held by the undersigned or one or more family members of the undersigned;

(iv) as a distribution or other transfer by a partnership to its partners or by a limited liability company to its members or by a corporation to its stockholders or to any wholly-owned subsidiary of such corporation; or

(v) to any affiliate, as defined in Rule 405 under the Securities Act of 1933, as amended, of the undersigned, including investment funds or other entities under common control or management that are affiliates of the undersigned; or

(c) transfers as forfeitures to the Company to satisfy tax withholding and remittance obligations of the undersigned in connection with the vesting or exercise of equity awards granted pursuant to the Company's equity incentive plans or pursuant to a net exercise or cashless exercise by the undersigned of outstanding equity awards pursuant to the Company's equity incentive plans; provided that any required filing under Section 16 of the Exchange Act reporting a change in beneficial ownership shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause, and no other public announcement shall be required or shall be made voluntarily in connection with such transfer;

provided that (A) in the case of any transfer, disposition or distribution pursuant to clauses (b)(i)-(v) above, each transferee, donee or distributee shall execute and deliver a lock-up

agreement in the form of this letter agreement to the Representatives and (B) in the case of any transfer, disposition or distribution pursuant to clauses (b)(i), (iii), (iv) and (v) above, no filing by any party (donor, donee, transferor or transferee) under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer, disposition or distribution during the Lock-Up Period (other than a filing on a Form 5 made after the expiration of the Lock-Up Period).

Furthermore, no provision in this letter agreement shall be deemed to restrict or prohibit:

(1) the transfer of the undersigned's Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to the Company in connection with (A) the termination of the undersigned's employment with the Company or (B) pursuant to agreements under which the Company has the option to repurchase such shares, *provided* that any required filing under Section 16 of the Exchange Act reporting a change in beneficial ownership shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause, and no other public announcement shall be required or shall be made voluntarily in connection with such transfer;

(2) the exercise by the undersigned of any option to purchase any shares of Common Stock pursuant to any stock incentive plan or stock purchase plan of the Company, *provided* that the underlying shares of Common Stock shall continue to be subject to the restrictions on transfer set forth in this letter agreement;

(3) the transfer of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to a bona fide third-party tender offer for securities of the Company, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a Change of Control (as defined below), which transaction is approved by the Board of Directors of the Company, *provided* that it shall be a condition of the transfer that if the tender offer, merger, consolidation or other such transaction is not completed, the undersigned's securities subject to this letter agreement shall remain subject to the restrictions herein;

(4) the conversion of the outstanding preferred stock of the Company into shares of Common Stock, *provided* that any such shares received upon such conversion shall be subject to the restrictions on transfer set forth in this letter agreement; and

(5) the transfer of shares of Common Stock by operation of law pursuant to a court order or a settlement agreement related to the distribution of assets in connection with the dissolution of a marriage or civil union, provided that such transferee agrees to be bound by the restrictions on transfer set forth herein and provided further that any required filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (5) and no other public announcement shall be required or shall be made voluntarily in connection with such transfer during the Lock-Up Period.

For purposes of this letter agreement, "family member" shall mean the spouse or domestic partner of the undersigned, an immediate family member of the undersigned or an immediate

family member of the undersigned's spouse or domestic partner, in each case living in the undersigned's household or whose principal residence is the undersigned's household (regardless of whether such spouse, domestic partner or family member may at the time be living elsewhere due to educational activities, health care treatment, military service, temporary internship or employment or otherwise). "Immediate family member" shall have the meaning set forth in Rule 16a-1(e) under the Exchange Act. For purposes of this letter agreement, "Change of Control" means the consummation of any bona fide third party tender offer, merger, consolidation or other similar transaction, in one transaction or a series of related transactions, the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company or its subsidiaries, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of 50% or more of the total voting power of the voting stock of the Company (or the surviving entity).

In addition, the foregoing paragraph shall not be deemed to restrict or prohibit the undersigned from establishing a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Common Stock, *provided* that such plan does not provide for any transfers or dispositions of Common Stock during the Lock-Up Period, and *provided, further*, that no filing by any party under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection therewith during the Lock-Up Period.

The undersigned now has, and, for the duration of this letter agreement will have, good and marketable title to the undersigned's shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock, free and clear of all liens, encumbrances, and claims whatsoever, other than any charitable pledge of such securities that by its terms could not result in any transfer, disposition or distribution of such securities during the Lock-Up Period.

If the undersigned is an officer or director of the Company, (i) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, the Representatives will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this letter agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock, except in compliance with the foregoing restrictions.

The undersigned agrees that, without the prior written consent of each of the Representatives, it will not, during the Lock-Up Period, make any demand for or exercise any right with respect to, the registration of any shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock and hereby waives any and

all notice requirements and other rights with respect to the registration of securities (including, if applicable, those rights set forth in that certain Investors' Rights Agreement, dated as of October 27, 2020, by and among the Company and the signatories thereto (as the same may be amended and/or restated from time to time)), with respect to any such registration.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Offering and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate.

This letter agreement shall automatically terminate and be of no further effect (i) June 30, 2021, in the event the execution of the Underwriting Agreement shall not have occurred on or before such date (provided that the Company may by written notice to the undersigned prior to June 30, 2021, extend such date for a period of up to an additional three months, in the event that the Underwriting Agreement has not been executed by such date), (ii) prior to the execution of the Underwriting Agreement, upon such date the Company notifies the Representatives in writing that it does not intend to proceed with the Offering, (iii) the registration statement filed with the Securities and Exchange Commission in connection with the Offering is withdrawn, or (iv) upon the termination of the Underwriting Agreement prior to the Closing Date (as defined in the Underwriting Agreement) in accordance with the terms thereof.

The undersigned hereby consents to receipt of this letter agreement in electronic form and understands and agrees that this letter agreement may be signed electronically. In the event that any signature is delivered by electronic mail, or otherwise by electronic transmission evidencing an intent to sign this letter agreement, such electronic mail or other electronic transmission shall create a valid and binding obligation of the undersigned with the same force and effect as if such signature were an original. Execution and delivery of this letter agreement by electronic mail or other electronic transmission is legal, valid and binding for all purposes.

[Signature page follows]

Yours very truly,

IF AN INDIVIDUAL:

By: _____

(duly authorized signature)

Name: _____

(please print full name)

Address:

_____

_____

E-mail: _____

IF AN ENTITY:

_____

(please print complete name of entity)

By: _____

(duly authorized signature)

Name: _____

(please print full name)

Title: _____

(please print full title)

Address:

_____

_____

E-mail: _____

Form of Press Release **EXHIBIT B**

Longboard Pharmaceuticals, Inc.
[*insert date*]

Longboard Pharmaceuticals, Inc. (the "Company") announced today that Citigroup Global Markets Inc., Evercore Group L.L.C., Guggenheim Securities, LLC and Cantor Fitzgerald & Co., the joint book-running managers in the Company's recent public sale of [•] shares of common stock, is [waiving] [releasing] a lock-up restriction with respect to [•] shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on [*insert date*], 20__, and such shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

LONGBOARD PHARMACEUTICALS, INC.
Public Offering of Common Stock

[*insert date*], 20__

[*name and address of officer or director requesting waiver*]

Dear Mr./Ms. [*insert name*]:

This letter is being delivered to you in connection with the offering by Longboard Pharmaceuticals, Inc. (the "Company") of [•] shares of common stock, $0.0001 par value (the "Common Stock"), of the Company and the lock-up letter dated [*insert date*], 20__ (the "Lock-up Letter"), executed by you in connection with such offering, and your request for a [waiver] [release] dated [*insert date*], 20__, with respect to [•] shares of Common Stock (the "Shares").

Citigroup Global Markets Inc., Evercore Group L.L.C., Guggenheim Securities, LLC and Cantor Fitzgerald & Co. hereby agree to [waive] [release] the transfer restrictions set forth in the Lock-up Letter, but only with respect to the Shares, effective [*insert date*], 20__; provided, however, that such [waiver] [release] is conditioned on the Company announcing the impending [waiver] [release] by press release through a major news service at least two business days before effectiveness of such [waiver] [release]. This letter will serve as notice to the Company of the impending [waiver] [release].

Except as expressly [waived] [released] hereby, the Lock-up Letter shall remain in full force and effect.

Yours very truly,

Citigroup Global Markets Inc.

By: _____
Name:
Title:

Evercore Group L.L.C.

By: _____
Name:
Title:

Guggenheim Securities, LLC

By: _____
Name:
Title:

Cantor Fitzgerald & Co.

By: _____
Name:
Title:

cc: Longboard Pharmaceuticals, Inc.

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF LONGBOARD PHARMACEUTICALS, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Longboard 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 "**General Corporation Law**"),

DOES HEREBY CERTIFY:

1. The original name of this corporation was Arena Neuroscience, Inc., and this corporation was originally incorporated pursuant to the General Corporation Law on January 3, 2020.

2. That the Board of Directors of this corporation duly adopted resolutions proposing to amend and restate the Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Longboard Pharmaceuticals, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 251 Little Falls Drive, City of Wilmington, County of New Castle, 19808. The name of its registered agent at such address is Corporation Service Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 310,000,000 shares of Common Stock, $0.0001 par value per share ("**Common Stock**") and (ii) 5,600,000 shares of Preferred Stock, $0.0001 par value per share ("**Preferred Stock**"). 300,000,000 shares of the authorized Common Stock of the Corporation are hereby designated "Voting Common Stock" (the "**Voting Common Stock**") and 10,000,000 shares of the authorized Common Stock of the Corporation are hereby designated "Non-Voting Common Stock" (the "**Non-Voting Common Stock**") with the rights, preferences, powers, privileges and restrictions, qualifications and limitations set forth herein. Effective at the time of

filing of this Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the "**Effective Time**"), every one share of Common Stock issued and outstanding immediately prior to the Effective Time shall, automatically and without any action on the part of the respective holders thereof, be converted into 1.38 shares of Voting Common Stock (the "**Forward Split**"); *provided*, *however*, that the Corporation shall issue no fractional shares of Voting Common Stock as a result of the Forward Split, but shall instead pay to any stockholder who would be entitled to receive a fractional share as a result of the actions set forth herein a sum in cash equal to the fair market value of the shares constituting such fractional share as determined by the Board of Directors of the Corporation. The Forward Split shall occur whether or not the certificates representing such shares of Common Stock are surrendered to the Corporation or its transfer agent. The Forward Split shall be effected on a record holder-by-record holder basis, such that any fractional shares of Common Stock resulting from the Forward Split and held by a single record holder shall be aggregated.

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

For the avoidance of doubt, each reference to "Common Stock" in this Amended and Restated Certificate of Incorporation shall be deemed to include both Voting Common Stock and Non-Voting Common Stock. Furthermore, any reference to "Common Stock" issued by the Corporation in any contract, agreement or otherwise to which the Corporation is a party, whether before or after the date of filing of this Amended and Restated Certificate of Incorporation, shall refer to the Voting Common Stock, unless specific reference is made to the Non-Voting Common Stock.

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Voting Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings). Unless required by law, Non-Voting Common Stock shall (i) have no voting rights on any matter and (ii) not be included in determining the number of shares voting or entitled to vote on any matter. Unless required by law, there shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Amended and Restated Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

3. Liquidation, Dissolution or Winding Up. The Non-Voting Common Stock shall rank on parity with the Voting Common Stock as to distributions of assets upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary.

4. Conversion. Each holder of shares of Non-Voting Common Stock shall have the right to convert each share of Non-Voting Common Stock held by such holder into one (1) share (subject to appropriate adjustment in the event of any stock dividend, stock split, reverse stock split, combination or other similar recapitalization with respect to the Voting Common Stock) of Voting Common Stock at such holder's election by providing written notice to the Company; *provided*, *however*, that such shares of Non-Voting Common Stock may only be converted into shares of Voting Common Stock during such time or times as immediately prior to or as a result of such conversion would not result in the holder(s) thereof beneficially owning (for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder (collectively, the "**Exchange Act**")), when aggregated with affiliates with whom such holder is required to aggregate beneficial ownership for purposes of Section 13(d) of the Exchange Act, in excess of the Beneficial Ownership Limitation. The "**Beneficial Ownership Limitation**" means initially 9.99% of the Voting Common Stock. Any holder of Non-Voting Common Stock may increase the Beneficial Ownership Limitation with respect to such holder, not to exceed 19.99% of the Voting Common Stock, upon 61 days' prior written notice to the Company and may decrease the Beneficial Ownership Limitation at any time upon providing written notice of such election to the Company; *provided*, *however*, that no holder may make such an election to change the percentage with respect to such holder unless all holders managed by the same investment advisor as such electing holder make the same election. Before any holder of Non-Voting Common Stock shall be entitled to convert any shares of Non-Voting Common Stock into shares of Voting Common Stock, such holder shall (A) surrender the certificate or certificates therefor (if any), duly endorsed, at the principal corporate office of the Company or of any transfer agent for the Non-Voting Common Stock, and (B) provide written notice to the Company, during regular business hours at its principal corporate office, of such conversion election (in form satisfactory to the Company) and shall state therein the name or names (i) in which the certificate or certificates representing the shares of Voting Common Stock into which the shares of Non-Voting Common Stock are so converted are to be issued (if such shares of Voting Common Stock are certificated) or (ii) in which such shares of Voting Common Stock are to be registered in book-entry form (if such shares of Voting Common Stock are uncertificated). If the shares of Voting Common Stock into which the shares of Non-Voting Common Stock are to be converted are to be issued in a name or names other than the name of the holder of the shares of Non-Voting Common Stock being converted, such notice shall be accompanied by a written instrument or instruments of transfer, in form satisfactory to the Company, duly executed by the holder. The Company shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees of such holder, a certificate or certificates representing the number of shares of Voting Common Stock to which such holder shall be entitled upon such conversion (if such shares of Voting Common Stock are certificated) or shall register such shares of Voting Common Stock in book-entry form (if such shares of Voting Common Stock are uncertificated). Such conversion shall be deemed to be effective immediately prior to the close of business on the date of such surrender of the shares of Non-Voting Common Stock to be converted following or contemporaneously with the provision of written notice of such conversion election as required by this section, the shares of Voting Common Stock issuable upon such conversion shall be deemed

to be outstanding as of such time, and the person or persons entitled to receive the shares of Voting Common Stock issuable upon such conversion shall be deemed to be the record holder or holders of such shares of Voting Common Stock as of such time. Notwithstanding anything herein to the contrary, shares of Non-Voting Common Stock represented by a lost, stolen or destroyed stock certificate may be converted if the holder thereof notifies the Company or its transfer agent that such certificate has been lost, stolen or destroyed and makes an affidavit of that fact acceptable to the Company and executes an agreement acceptable to the Company to indemnify the Company from any loss incurred by it in connection with such certificate. The effectiveness of any conversion of any shares of Non-Voting Common Stock into shares of Voting Common Stock is subject to the expiration or early termination of any applicable premerger notification and waiting period requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.

B. PREFERRED STOCK

5,600,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A Preferred Stock**" with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" or "Sections" in this Part B of this Article Fourth refer to sections and Sections of Part B of this Article Fourth. References to "Preferred Stock" mean the Series A Preferred Stock.

1. Dividends.

The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Amended and Restated Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The "**Original Issue Price**" shall mean, with respect to the Series A Preferred Stock, $10.00 per

share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the applicable Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event (as defined below), the holders of shares of Preferred Stock then outstanding shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds (as defined below), as applicable, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) one times the Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the "**Liquidation Amount**"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Section 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment in full of all Liquidation Amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, the consideration not payable to the holders of shares of Preferred Stock pursuant to Section 2.1 or the remaining Available Proceeds, as the case may be, shall be distributed among the holders of shares of Voting Common Stock and Non-Voting Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least a majority of the outstanding shares of Preferred Stock (the "**Requisite Holders**") elect otherwise by written notice sent to the Corporation at least 10 days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the business or assets of the Corporation and its subsidiaries taken as a whole or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation in such Deemed Liquidation Event shall be allocated to the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth (90th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the Requisite Holders so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation)**,** together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "**Available Proceeds**"), on the one hundred fiftieth (150th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share

equal to the applicable Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Section 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities to be paid or distributed to such holders pursuant to such Deemed Liquidation Event. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation, including the approval of at least one Preferred Director (as defined herein) to the extent that at least one Preferred Director is then serving.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Section 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Section 2.3.4, consideration placed into escrow or retained as a holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of this Amended and Restated Certificate of Incorporation, holders of Preferred

Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Corporation (the "**Preferred Directors**") and the holders of record of the shares of Voting Common Stock, exclusively and as a separate class, shall be entitled to elect three directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Preferred Stock or Voting 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 the first sentence of this Section 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Preferred Stock or Voting 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 the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Voting Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or classes or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or classes or series or by any remaining director or directors elected by the holders of such class or classes or series pursuant to this Section 3.2. Notwithstanding anything to the contrary contained herein, any vacancy, including newly created directorships resulting from any increase in the authorized number of directors, and vacancies created by removal or resignation of a director, may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and qualified, unless sooner displaced; provided, however, that where such vacancy is a director seat that the holders of a class or series of capital stock are entitled to fill, the holders of such class or series may override the Board of Directors of the Corporation action to fill such vacancy (or replace the director appointed by the Board of Directors of the Corporation to fill such vacancy at any time), by (i) voting for their own designee to fill such vacancy (or to replace such director appointed by the Board of Directors of the Corporation to fill such vacancy) at a meeting of the Corporation's stockholders or (ii) written consent, if the consenting stockholders hold a sufficient number of shares to elect their designee at a meeting of the stockholders in which all members of such class or series are present and voted. The rights of the holders of the Preferred Stock and the rights of the holders of the Voting Common Stock under the first sentence of this Section 3.2 shall terminate on the first date following the time at which the first share of Series A Preferred Stock was issued (the "**Original Issue Date**") on which there are issued and outstanding less than 1,680,000 shares of Preferred Stock (subject to appropriate adjustment in the event of

any stock dividend, stock split, combination, or other similar recapitalization with respect to the Preferred Stock).

3.3 Preferred Stock Protective Provisions. At any time when at least 1,680,000 shares of Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation, recapitalization, reclassification, or otherwise, do any of the following without (in addition to any other vote required by law or this Amended and Restated Certificate of Incorporation) the written consent or affirmative vote of the Requisite Holders given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect.

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing, if such transaction would result in holders of Preferred Stock receiving less than two times the Original Issue Price per share in such transaction;

3.3.2 amend, alter or repeal any provision of this Amended and Restated Certificate of Incorporation or the Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Preferred Stock;

3.3.3 (i) create, or authorize the creation of, or issue or obligate itself to issue shares of, or reclassify, any capital stock unless the same ranks junior to the Preferred Stock with respect to its rights, preferences and privileges, or (ii) increase the authorized number of shares of Preferred Stock or any additional class or series of capital stock of the Corporation unless the same ranks junior to the Preferred Stock with respect to its rights, preferences and privileges;

3.3.4 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at no greater than the lower of the original purchase price thereof or the fair market value thereof at such time or (iv) as approved by the Board of Directors of the Corporation, including the approval of at least one Preferred Director, to the extent that at least one Preferred Director is then serving;

3.3.5 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue, any shares of any class or series of capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect

subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

3.3.6 increase or decrease the size of the Board of Directors of the Corporation.

4. Optional Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Voting Common Stock as is determined by dividing the Original Issue Price by the Conversion Price (as defined below) in effect at the time of conversion. The "**Conversion Price**" applicable to the Series A Preferred Stock shall initially be equal to $7.2463. Such initial Conversion Price, and the rate at which shares of Preferred Stock may be converted into shares of Voting Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock; provided that the foregoing termination of Conversion Rights shall not affect the amount(s) otherwise paid or payable in accordance with Section 2.1 to holders of Preferred Stock pursuant to such liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event.

4.2 Fractional Shares. No fractional shares of Voting Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the number of shares of Voting Common Stock to be issued upon conversion of the Preferred Stock shall be rounded to the nearest whole share.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Voting Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the

Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Voting Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Voting Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Voting Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Voting Common Stock, and (ii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Voting Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Voting Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Amended and Restated Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Conversion Price below the then par value of the shares of Voting Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Voting Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Voting Common Stock in exchange therefor and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price shall be made for any declared but unpaid dividends on the

Preferred Stock surrendered for conversion or on the Voting Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Voting Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Voting Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) as to any series of Preferred Stock shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on such series of Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.5, 4.6, 4.7 or 4.8**;**

(iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation, including the approval of all of the then-serving Preferred Directors (except that such Preferred Director approval shall not be required with respect to issuances under the Corporation's 2020 Equity Incentive Plan as in effect on the Original Issue Date);

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation, including the approval of all of the then-serving Preferred Directors;

(vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including the approval of all of the then-serving Preferred Directors;

(vii) shares of Common Stock, Options or Convertible Securities issued as acquisition consideration pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including the approval of all of the then-serving Preferred Directors; or

(viii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including the approval of all of the then-serving Preferred Directors.

(b) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(c) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

4.4.2 No Adjustment of Conversion Price. No adjustment in the Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the Requisite Holders agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date), are revised after the Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4, the Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time or from time to time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a

consideration per share less than the Conversion Price in effect immediately prior to such issuance or deemed issuance, then the Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-tenth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP_2" shall mean the Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) "CP_1" shall mean the Conversion Price in effect immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or deemed issuance or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued or deemed issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Section 4.4, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property. Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4 then, upon the final such issuance, the Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, other than the Forward Split, the Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this Section as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the

provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Voting Common Stock to the public at a price of at least .9638 times the Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Voting Common Stock, other than the Forward Split), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least $50,000,000 of gross proceeds to the Corporation and in connection with such offering the Voting Common Stock is listed for trading on the Nasdaq Stock Market's National Market, the New York Stock Exchange or another exchange or marketplace approved the Board of Directors of the Corporation, including the approval of at least one Preferred Director to the extent that at least one Preferred Director is then serving, or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the Requisite Holders (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Voting Common Stock, at the then effective conversion rate as calculated pursuant to Section 4.1.1 and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the

Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Voting Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Voting Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. Redemption. Other than as set forth in Section 2.3.2(b), the Preferred Stock is not redeemable.

7. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed, converted or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption, conversion or acquisition.

8. Waiver. Except as otherwise set forth herein, any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the Requisite Holders.

9. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by this Amended and Restated Certificate of Incorporation or the Bylaws of the Corporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the Corporation is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by this Amended and Restated Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation. Each director shall be entitled to one vote on each matter presented to the Board of Directors of the Corporation; provided, however, that, so long as the holders of Preferred Stock are entitled to elect the Preferred Directors, the affirmative vote of all of the Preferred Directors then in office shall be required for the authorization by the Board of Directors of the Corporation of any of the matters set forth in Section 5.4 of the Investors' Rights Agreement, dated as of October 27, 2020, by and among the Corporation and the other parties thereto, as such agreement may be amended from time to time.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors of the Corporation or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through provisions of the Bylaws of the Corporation, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation while such Covered Person is performing services in such capacity. Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Amended and Restated Certificate of Incorporation, the affirmative vote of the Requisite Holders will be required to amend or repeal, or to adopt any provisions inconsistent with this Article Eleventh.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware 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 the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, 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 (10) days following such determination), which 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 Twelfth 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 Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth 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.

THIRTEENTH: In connection with any repurchase of shares of Common Stock permitted under this Amended and Restated Certificate of Incorporation from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors of the Corporation (in addition to any other consent required under this Amended and Restated Certificate of

Incorporation), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined under applicable law). Accordingly, for purposes of making any calculation under applicable law 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.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

[Signature Page Follows]

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on March 5, 2021.

By: /s/ Kevin R. Lind
Name: Kevin R. Lind
Title: President and Chief Executive Officer

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF LONGBOARD PHARMACEUTICALS, INC.

Kevin R. Lind, hereby certifies that:

ONE: He is the duly elected President and Chief Executive Officer of Longboard Pharmaceuticals, Inc., a Delaware corporation.

TWO: The original name of the corporation is Arena Neuroscience, Inc. and the original date of filing of said corporation's original certificate of incorporation with the Delaware Secretary of State was January 3, 2020.

THREE: The Amended and Restated Certificate of Incorporation of the corporation is hereby amended and restated to read in its entirety as follows:

I.

The name of this corporation is Longboard Pharmaceuticals, Inc. (the "***Company***").

II.

The address of the registered office of the Company in the State of Delaware is 251 Little Falls Drive, City of Wilmington, County of New Castle, 19808 and the name of its registered agent at such address is Corporation Service Company.

III.

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law ("***DGCL***").

IV.

A. The Company is authorized to issue two classes of stock to be designated, respectively, "***Common Stock***" and "***Preferred Stock***." The total number of shares which the Company is authorized to issue is 320,000,000 shares. 310,000,000 shares shall be Common Stock, each having a par value of $0.0001. 10,000,000 shares shall be Preferred Stock, each having a par value of $0.0001. Three hundred million (300,000,000) shares of the Common Stock are hereby designated "***Voting Common Stock***" and ten million (10,000,000) shares of the Common Stock are hereby designated as "***Non-Voting Common Stock***," each with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Any reference to "Common Stock" issued by the Company in any contract, agreement or otherwise to which the Company is a party, whether before or after the date of filing of this Amended and Restated Certificate of Incorporation (this "***Certificate of Incorporation***"), shall refer to Voting Common Stock, unless specific reference is made to the Non-Voting Common Stock.

B. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Company (the "***Board of Directors***") is hereby expressly authorized to provide for the issue of any or all of the unissued and undesignated shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Company entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

C. Each outstanding share of Voting Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Company for their vote; *provided, however*, that, except as otherwise required by law, holders of Voting Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series of Preferred Stock are entitled, either separately or together as a class with the holders of one or more other such series of Preferred Stock, to vote thereon by law or pursuant to this Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock). Non-Voting Common Stock (i) shall be non-voting except as may be required by law and (ii) shall not entitle the holder thereof to vote on the election of directors at any time. The Non-Voting Common Stock shall rank on parity with the Voting Common Stock as to distributions of assets upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary.

D. Each holder of shares of Non-Voting Common Stock shall have the right to convert each share of Non-Voting Common Stock held by such holder into one (1) share (subject to appropriate adjustment in the event of any stock dividend, stock split, reverse stock split, combination or other similar recapitalization with respect to the Voting Common Stock) of Voting Common Stock at such holder's election by providing written notice to the Company; *provided, however*, that such shares of Non-Voting Common Stock may only be converted into shares of Voting Common Stock during such time or times as immediately prior to or as a result of such conversion would not result in the holder(s) thereof beneficially owning (for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder (collectively, the "***Exchange Act***")), when aggregated with affiliates with whom such holder is required to aggregate beneficial ownership for purposes of Section 13(d) of the Exchange Act, in excess of the Beneficial Ownership Limitation. The "***Beneficial Ownership***

Limitation" means initially 9.99% of the Voting Common Stock. Any holder of Non-Voting Common Stock may increase the Beneficial Ownership Limitation with respect to such holder, not to exceed 19.99% of the Voting Common Stock, upon 61 days' prior written notice to the Company and may decrease the Beneficial Ownership Limitation at any time upon providing written notice of such election to the Company; *provided*, *however*, that no holder may make such an election to change the percentage with respect to such holder unless all holders managed by the same investment advisor as such electing holder make the same election. Before any holder of Non-Voting Common Stock shall be entitled to convert any shares of Non-Voting Common Stock into shares of Voting Common Stock, such holder shall (A) surrender the certificate or certificates therefor (if any), duly endorsed, at the principal corporate office of the Company or of any transfer agent for the Non-Voting Common Stock, and (B) provide written notice to the Company, during regular business hours at its principal corporate office, of such conversion election (in form satisfactory to the Company) and shall state therein the name or names (i) in which the certificate or certificates representing the shares of Voting Common Stock into which the shares of Non-Voting Common Stock are so converted are to be issued (if such shares of Voting Common Stock are certificated) or (ii) in which such shares of Voting Common Stock are to be registered in book-entry form (if such shares of Voting Common Stock are uncertificated). If the shares of Voting Common Stock into which the shares of Non-Voting Common Stock are to be converted are to be issued in a name or names other than the name of the holder of the shares of Non-Voting Common Stock being converted, such notice shall be accompanied by a written instrument or instruments of transfer, in form satisfactory to the Company, duly executed by the holder. The Company shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees of such holder, a certificate or certificates representing the number of shares of Voting Common Stock to which such holder shall be entitled upon such conversion (if such shares of Voting Common Stock are certificated) or shall register such shares of Voting Common Stock in book-entry form (if such shares of Voting Common Stock are uncertificated). Such conversion shall be deemed to be effective immediately prior to the close of business on the date of such surrender of the shares of Non-Voting Common Stock to be converted following or contemporaneously with the provision of written notice of such conversion election as required by this section, the shares of Voting Common Stock issuable upon such conversion shall be deemed to be outstanding as of such time, and the person or persons entitled to receive the shares of Voting Common Stock issuable upon such conversion shall be deemed to be the record holder or holders of such shares of Voting Common Stock as of such time. Notwithstanding anything herein to the contrary, shares of Non-Voting Common Stock represented by a lost, stolen or destroyed stock certificate may be converted if the holder thereof notifies the Company or its transfer agent that such certificate has been lost, stolen or destroyed and makes an affidavit of that fact acceptable to the Company and executes an agreement acceptable to the Company to indemnify the Company from any loss incurred by it in connection with such certificate. The effectiveness of any conversion of any shares of Non-Voting Common Stock into shares of Voting Common Stock is subject to the expiration or early termination of any applicable premerger notification and waiting period requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.

V.

For the management of the business and for the conduct of the affairs of the Company, and in further definition, limitation and regulation of the powers of the Company, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. The management of the business and the conduct of the affairs of the Company shall be vested in its Board of Directors. The number of directors that shall constitute the Board of Directors shall be fixed exclusively by resolutions adopted by a majority of the authorized number of directors constituting the Board of Directors.

B. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the initial classification of the Board of Directors, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following such initial classification, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following such initial classification, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this section, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

C. Subject to the rights of any series of Preferred Stock that may be designated from time to time to elect additional directors under specified circumstances, neither the Board of Directors nor any individual director may be removed without cause. Subject to any limitations imposed by applicable law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least 66 2/3% of the voting power of all then-outstanding shares of capital stock of the Company entitled to vote generally at an election of directors, voting together as a single class.

D. Subject to any limitations imposed by applicable law and subject to the rights of the holders of any series of Preferred Stock that may be designated from time to time, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors, shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders and except as otherwise provided by applicable law, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director’s successor shall have been elected and qualified.

E. The Board of Directors is expressly empowered to adopt, amend or repeal the Amended and Restated Bylaws of the Company (the "***Bylaws***"). Any adoption, amendment or repeal of the Bylaws by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders shall also have power to adopt, amend or repeal the Bylaws; *provided*, *however,* that, in addition to any vote of the holders of any class or series of stock of the Company required by law or by this Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class (for clarification, the holders of Non-Voting Common Stock are not entitled to vote in the election of directors and should not be included in the calculation of such percentage of the voting power).

F. The directors of the Company need not be elected by written ballot unless the Bylaws so provide.

G. No action shall be taken by the stockholders of the Company except at an annual or special meeting of stockholders called in accordance with the Bylaws. No action shall be taken by the stockholders of the Company by written consent or electronic transmission.

H. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Company shall be given in the manner provided in the Bylaws.

VI.

A. The liability of a director of the Company for monetary damages shall be eliminated to the fullest extent under applicable law.

B. To the fullest extent permitted by applicable law, the Company is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Company (and any other persons to which applicable law permits the Company 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 such applicable law. If applicable law is amended after approval by the stockholders of this Article VI to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director to the Company shall be eliminated or limited to the fullest extent permitted by applicable law as so amended.

C. Any repeal or modification of this Article VI shall only be prospective and shall not affect the rights or protections or increase the liability of any director under this Article VI in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

VII.

A. Unless the Corporation consents in writing to the selection of an alternative forum, 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 shall be the sole and exclusive forum for the following state, statutory and common law claims or causes of action: (A) any derivative claim or cause of action brought on behalf of the Corporation; (B) any claim or cause of action for breach of a fiduciary duty owed by any current or former director, officer or other employee of the Corporation, to the Corporation or the Corporation's stockholders; (C) any claim or cause of action against the Corporation or any current or former director, officer or other employee of the Corporation, arising out of or pursuant to any provision of the DGCL, this Certificate of Incorporation or the Bylaws of the Corporation (as each may be amended from time to time); (D) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of this Certificate of Incorporation or the Bylaws of the Corporation (as each may be amended from time to time, including any right, obligation, or remedy thereunder); (E) any claim or cause of action as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and (F) any claim or cause of action against the Corporation or any current or former director, officer or other employee of the Corporation, governed by the internal-affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court having personal jurisdiction over the indispensable parties named as defendants. This Section A of Article VII shall not apply to claims or causes of action brought to enforce a duty or liability created by the Securities Act of 1933, as amended (the "***1933 Act***"), or the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction.

B. Unless the Corporation consents in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause or causes of action arising under the 1933 Act, as amended, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by the Corporation, its officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional or entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

C. Any person or entity holding, owning or otherwise acquiring any interest in any security of the Corporation shall be deemed to have notice of and consented to the provisions of this Certificate of Incorporation.

VIII.

A. The Company reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in Section B of this Article VIII, and all rights conferred upon the stockholders herein are granted subject to this reservation.

B. Notwithstanding any other provisions of this Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of the Company required by law or by this Certificate of Incorporation or any certificate of designation filed with respect to a series

of Preferred Stock that may be designated from time to time, subject to the rights of the holders of any series of Preferred Stock, the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class (for clarification, the holders of Non-Voting Common Stock are not entitled to vote in the election of directors and should not be included in the calculation of such percentage of the voting power), shall be required to alter, amend or repeal Articles V, VI, VII or VIII of this Certificate of Incorporation.

* * * *

FOUR: This Certificate of Incorporation has been duly adopted and approved by the Board of Directors and by written consent of the stockholders in accordance with Sections 228, 242 and 245 of the DGCL and written notice of such action has been given as provided in section 228 of the DGCL.

[Signature page follows]

IN WITNESS WHEREOF, Longboard Pharmaceuticals, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by its President and Chief Executive Officer this ___ day of _____, 2021.

LONGBOARD PHARMACEUTICALS, INC.

KEVIN R. LIND
President and Chief Executive Officer

Exhibit 4.1


LONGBOARD
PHARMACEUTICALS
NUMBER
LP
SHARES
CUSIP 54300N 10 3
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE
SEE REVERSE FOR CERTAIN DEFINITIONS AND LEGENDS
This certifies that
is the record holder of
FULLY PAID AND NONASSESSABLE SHARES OF COMMON STOCK, $0.0001 PAR VALUE PER SHARE, OF
LONGBOARD PHARMACEUTICALS, INC.
transferable on the books of the Corporation in person or by duly authorized attorney upon surrender of this Certificate properly endorsed. This Certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.
WITNESS the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.
Dated:
PRESIDENT & CHIEF EXECUTIVE OFFICER
LONGBOARD PHARMACEUTICALS, INC. CORPORATE SEAL DELAWARE
CHIEF FINANCIAL OFFICER
COUNTERSIGNED AND REGISTERED:
AMERICAN STOCK TRANSFER & TRUST COMPANY, LLC
(BROOKLYN, NY)
TRANSFER AGENT AND REGISTRAR
BY:
AUTHORIZED SIGNATURE
SPECIMEN

The Corporation shall furnish without charge to each stockholder who so requests a statement of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock of the Corporation or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Such requests shall be made to the Corporation's Secretary at the principal office of the Corporation.

KEEP THIS CERTIFICATE IN A SAFE PLACE. IF IT IS LOST, STOLEN, OR DESTROYED THE CORPORATION WILL REQUIRE A BOND INDEMNITY AS A CONDITION TO THE ISSUANCE OF A REPLACEMENT CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	–	as tenants in common
TEN ENT	–	as tenants by the entireties
JT TEN	–	as joint tenants with right of survivorship and not as tenants in common
COM PROP	–	as community property

UNIF GIFT MIN ACT – _____ Custodian _____
(Cust) (Minor)
under Uniform Gifts to Minors Act _____
(State)

UNIF TRF MIN ACT – _____ Custodian (until age _____)
(Cust)
_____ under Uniform Transfers
(Minor)
to Minors Act _____
(State)

Additional abbreviations may also be used though not in the above list.

FOR VALUE RECEIVED, _____ hereby sell(s), assign(s) and transfer(s) unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

_____
(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

_____

_____

_____ shares of the capital stock represented by within Certificate, and do hereby irrevocably constitute and appoint

_____ attorney-in-fact to transfer the said stock on the books of the within named Corporation with full power of the substitution in the premises.

Dated _____

X _____

X _____

Signature(s) Guaranteed:

NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER.

By _____

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION, (BANKS, STOCKBROKERS, SAVINGS AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM), PURSUANT TO S.E.C. RULE 17Ad-15. GUARANTEES BY A NOTARY PUBLIC ARE NOT ACCEPTABLE. SIGNATURE GUARANTEES MUST NOT BE DATED.

Cooley

Steven M. Przesmicki
+1 858 550 6070
przes@cooley.com

March 8, 2021

Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Ladies and Gentlemen:

You have requested our opinion, as counsel to Longboard Pharmaceuticals, Inc., a Delaware corporation (the "***Company***"), in connection with the filing by the Company of a Registration Statement (File No. 333-253329) on Form S-1 (the "***Registration Statement***") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "***Prospectus***"), covering an underwritten public offering of up to 5,750,000 shares (the "***Shares***") of the Company's common stock, par value $0.0001, which includes up to 750,000 Shares that may be sold pursuant to the exercise of an option to purchase additional shares.

In connection with this opinion, we have (i) examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company's Certificate of Incorporation and Bylaws, each as currently in effect, (c) the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws filed as Exhibits 3.2 and 3.4, respectively, to the Registration Statement which are to be in effect in connection with the closing of the offering contemplated by the Registration Statement, and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below, and (ii) assumed that the Shares will be sold at a price established by the Board of Directors of the Company or a duly authorized committee thereof. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials, and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness of such documents. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefor as described in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

Cooley LLP

By: /s/ Steven M. Przesmicki
Steven M. Przesmicki

Exhibit 10.3

LONGBOARD PHARMACEUTICALS, INC.

RESTRICTED STOCK AWARD GRANT NOTICE
(2020 EQUITY INCENTIVE PLAN)

Longboard Pharmaceuticals, Inc. (the "***Company***"), pursuant to its 2020 Equity Incentive Plan (the "***Plan***"), hereby awards to Participant, in consideration for Participant's past or future services actually or to be rendered to the Company, the number of shares of Common Stock (the "***Shares***") set forth below (the "***Award***"). The Award is subject to all of the terms and conditions as set forth in this Restricted Stock Award Grant Notice (the "***Grant Notice***") and the attached Restricted Stock Award Terms and Conditions (together with the Grant Notice, the "***Award Agreement***"), and the Plan, all of which are attached to this Grant Notice and incorporated into this Grant Notice in their entirety. Capitalized terms not explicitly defined in the Award Agreement but defined in the Plan will have the meanings provided in the Plan. If the Company uses an electronic capitalization table system (such as Carta or Shareworks) and the fields below are blank or the information is otherwise provided in a different format electronically, the blank fields and other information (such as exercise schedule and type of grant) shall be deemed to come from the electronic capitalization system and is considered part of this Grant Notice.

Participant:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Award:	_____
Consideration:	[Participant's services]

Vesting Schedule: [**Sample of standard vesting.** 12/48ths of the total shares will vest on the one-year anniversary of the Vesting Commencement Date, and 1/48th of the total shares will vest each month thereafter on the same day of the month as the Vesting Commencement Date (or if there is no corresponding day, on the last day of the month), subject to Participant's Continuous Service as of each such date].

Additional Terms/Acknowledgements: Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Award subject to all of the terms and provisions of the Plan and this Award Agreement (including all attachments and exhibits) and has had an opportunity to obtain the advice of counsel prior to executing and accepting the Award. By accepting this Award, Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under the Plan or this Award.

Participant further consents to receive any documents related to the Plan by electronic delivery and to participate in the Plan through an online or electronic system established and maintained by the Company or a third party designated by the Company.

Participant further acknowledges that as of the Date of Grant, this Award Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the acquisition of stock in the Company and supersede all prior oral and written agreements on that subject, with the exception of (i) options, restricted stock awards or other compensatory stock awards previously granted and delivered to Participant, and (ii) any written employment or severance arrangement that would provide for vesting acceleration of this Award upon the terms and conditions set forth therein.

Participant further acknowledges that this Award 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, Participant in any capacity. Participant has been provided with an opportunity to consult with Participant's own counsel with respect to this Award Agreement.

This Award may be executed in one 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, Uniform Electronic Transactions Act or other applicable law) 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.

Longboard Pharmaceuticals, Inc.

By: _____
Signature

Title: _____

Date: _____

Participant:

_____
Signature

Date: _____

Attachments:

Attachment I:	Restricted Stock Award Terms and Conditions
Exhibit A:	Assignment Separate from Certificate
Exhibit B :	Joint Escrow Instructions
Attachment II:	2020 Equity Incentive Plan
Attachment III:	Section 83(b) Election

ATTACHMENT I

RESTRICTED STOCK AWARD TERMS AND CONDITIONS

LONGBOARD PHARMACEUTICALS, INC.

(2020 EQUITY INCENTIVE PLAN)

RESTRICTED STOCK AWARD TERMS AND CONDITIONS

Longboard Pharmaceuticals, Inc. (the "***Company***") has awarded you, in exchange for your services to the Company, the number of Shares indicated in the Grant Notice (the "***Award***") pursuant to its 2020 Equity Incentive Plan (the "***Plan***"). The Grant Notice and these Restricted Stock Award Terms and Conditions are collectively referred to as the "***Award Agreement***". Capitalized terms not explicitly defined in this Agreement but defined in the Plan will have the same meanings given to them in the Plan.

The details of your Award, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. Escrow of Shares. As security for your faithful performance of the terms of this Award Agreement and to ensure the availability for delivery of the Unvested Shares upon exercise of the Reacquisition Right, you agree that the Shares will be held in escrow pursuant to the terms of the Joint Escrow Instructions attached to this Agreement as **Exhibit B**. You agree to execute and deliver to the individual designated as the escrow agent in the Joint Escrow Instructions or person's designee (the "***Escrow Agent***"), (i) the Joint Escrow Instructions and (ii) two Assignment Separate From Certificate forms duly endorsed (with date and number of shares blank) substantially in the form attached to this Agreement as **Exhibit A** and deliver the same, along with the certificate or certificates evidencing the Unvested Shares, which will be held and used by the Escrow Agent pursuant to the terms of the Joint Escrow Instructions.

2. Vesting. Subject to the limitations contained herein, the Shares will vest pursuant to the Vesting Schedule in the Grant Notice, provided that vesting will cease upon the termination of your Continuous Service. "***Vested Shares***" will mean Shares that have vested in accordance with the Vesting Schedule, and "***Unvested Shares***" will mean Shares that have not vested in accordance with the Vesting Schedule.

3. Number of Shares; Capitalization Adjustments. The number of Shares subject to your Award may be adjusted from time to time for Capitalization Adjustments. In the event of any such Capitalization Adjustments, new, substituted or additional securities or other property to which you are entitled by reason of your ownership of the Unvested Shares will be immediately subject to the same vesting requirements and vesting schedule that is applicable to the Shares with respect to which such additional Shares relate, as well as all transfer restrictions contained in this Award Agreement, including the Reacquisition Right, the Right of First Refusal and the Lock-Up Period (each as defined below). No fractional shares or rights for fractional shares will be created pursuant to this Section. Any fraction of a share will be rounded down to the nearest whole share.

4. Securities Law Compliance. The Shares are not registered under the Securities Act. At this time, the Company has determined that the issuance of the Shares under this Award is exempt from the registration requirements of the Securities Act. If the Company determines at any time that an exemption from the registration requirements of the Securities Act was not available or that the issuance of the Shares otherwise would not comply with any other applicable laws and regulations, then the Company will not be obligated to issue the Shares or may rescind the award to you.

5. Transfer Restrictions. In addition to any other limitation on transfer created by the Company's bylaws and applicable securities laws, you may not Transfer all or any part of the Unvested Shares or any interest in the Unvested Shares while such shares are subject to the Reacquisition Right (as defined below) or continue to be held by the Escrow Agent (as defined below) or by the Company's transfer agent in restricted book entry form. In the case of Vested Shares, you may not Transfer the Vested Shares or any interest in the Vested Shares except in compliance with this Award Agreement, including without limitation the Right of First Refusal (as defined below), the Company's bylaws and applicable securities laws. As used in this Award Agreement, the term "***Transfer***" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family. In such case, the transferee or other recipient will receive and hold the Shares so transferred subject to the provisions of this Award Agreement, and there will be no further transfer of such shares except in accordance with the terms of this Award Agreement. The term "***Immediate Family***" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

6. Unvested Share Reacquisition Right.

(a) Reacquisition Right. In the event your Continuous Service terminates, the Company will automatically reacquire (the "***Reacquisition Right***") on the date that is 90 days after the termination of your Continuous Service (the "***Reacquisition Date***") all Unvested Shares as of the date of your termination of Continuous Service without any payment to you (that is, for zero dollars ($0)) and without any required action or notice to you. You hereby agree to take whatever action the Company deems necessary to effectuate the Company's reacquisition of the Unvested Shares. Following such reacquisition, the Company will become the legal and beneficial owner of the Unvested Shares being reacquired and all rights and interests in and related to such shares, and the Company will have the right to transfer to its own name the Unvested Shares being reacquired by the Company without further action by you. Notwithstanding anything to the contrary in this Section or in this Award Agreement, the Company may elect to waive, in its sole discretion, its Reacquisition Right in whole or in part by providing written notice to you (with a copy to the Escrow Agent, as defined below), at any time prior to or on the Reacquisition Date, and the Escrow Agent may then release to you the number of Shares not being reacquired by the Company.

(b) Corporate Transactions. To the extent the Reacquisition Right remains in effect following a Corporate Transaction or Change in Control, unless otherwise provided by the Board pursuant to the terms of the Plan, it will apply to the new capital stock, cash or other property received in exchange for the Unvested Shares in consummation of the Corporate Transaction or Change in Control, as applicable, but only to the extent the Unvested Shares were at the time covered by such right.

(c) Termination of Reacquisition Right. The Company's Reacquisition Right will terminate upon the earlier of (i) the Company's reacquisition in full of the Unvested Shares (or waiver of the Reacquisition Right) and (ii) the expiration of the Company's Reacquisition Right.

7. Right of First Refusal. Shares that are received under your Award are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however,* that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below (the "***Right of First Refusal***") will apply. The Right of First Refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "***Listing Date***").

(a) Prior to the Listing Date, you may not validly Transfer any Shares received under the Award, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any Shares or any interest therein, the record holder of the Shares to be transferred (the "***Offered Shares***") will give written notice (by registered or certified mail) to the Company (the "***ROFR Notice***"). Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "***Notice Date***" and the record holder of the Offered Shares will be hereinafter referred to as the "***Offeror***."

(ii) For a period of 30 calendar days after the Notice Date, the Company will have the option to exercise its Right of First Refusal and purchase all or any portion of the Offered Shares at the purchase price and on the terms set forth in this Section. In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30 days.

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the ROFR Notice), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the Company elects not to exercise its Right of First Refusal as to the Offered Shares, the Transfer proposed in the ROFR Notice may take place; *provided*, *however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the 10th calendar day after the expiration of the 30 day option exercise period or after the 90th calendar day after the expiration of the 30 day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section.

(b) None of the shares of Common Stock received under the Award will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section have been complied with in all respects. The certificates of stock evidencing Shares received under the Award will bear an appropriate legend referring to the transfer restrictions imposed by this Section.

8. Lock-Up Period. By accepting your Award, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with applicable FINRA rules (the "***Lock-Up Period***");

provided, however, that nothing contained in this Section will prevent the exercise of a reacquisition or repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect to the foregoing covenant. You also agree that any transferee of any other shares of Common Stock (or other securities) of the Company held by you will be bound by this Section. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The underwriters of the Company's stock are intended third party beneficiaries of this Section and will have the right, power and authority to enforce the provisions of this Section as though they were a party to this Award Agreement. You further agree that the obligations contained in this Section 8 shall also, if so determined by the Company's Board of Directors, apply in the Company's initial listing of its Common Stock on a national securities exchange by means of a registration statement on Form S-1 under the Securities Act (or any successor registration form under the Securities Act subsequently adopted by the Securities and Exchange Commission) filed by the Company with the Securities and Exchange Commission that registers shares of existing capital stock of the Company for resale (a "***Direct Listing***") (and, for avoidance of doubt, the Lock-Up Period shall be deemed to include the period following the Direct Listing during which the restrictions under this Section 8 apply) provided that all holders of at least 5% of the Company's outstanding Common Stock (after giving effect to the conversion into Common Stock of any outstanding Preferred Stock of the Company) are subject to substantially similar obligations with respect to such Direct Listing.

9. Rights as Stockholder.

(a) General. Subject to the provisions of this Award Agreement, you will exercise all rights and privileges of a stockholder of the Company with respect to the Shares, including for purposes of exercising any voting rights relating to any Unvested Shares.

(b) Dividends. You will be deemed to be the holder of the Unvested Shares for purposes of receiving any dividends that may be paid with respect to such Shares; *provided, however*, that any dividends or other distributions paid with respect to the Unvested Shares shall be subject to all of the terms and conditions applicable under this Award Agreement to the same extent as the Unvested Shares. For clarity, cash dividends made prior to the vesting of any Unvested Shares will be withheld and paid to you (without interest) only if, when and to the extent, such Shares become Vested Shares.

10. Waiver of Information Rights. You hereby acknowledge and agree that, except for such information as required to be delivered to you by the Company pursuant to any other agreement by and between you and the Company, you shall have no right to receive any information from the Company by virtue of your purchase of the Shares, ownership of the Shares, or as a result of you being a holder of record of stock of the Company. Without limiting the foregoing, to the fullest extent permitted by law, you hereby waive your inspection rights under Section 220 of the Delaware General Corporation Law and all such similar information and/or inspection rights that may be provided under the law of any jurisdiction, or any federal, state or foreign regulation, that are, or may become, applicable to the Company, the Company's capital stock or the Shares (the "***Inspection Rights***"). You hereby covenant and agree never to directly or indirectly commence, voluntarily aid in any way, prosecute, assign, transfer, or cause to be commenced any claim, action, cause of action, or other proceeding to pursue or exercise the Inspection Rights.

11. Restrictive Legends. All certificates representing the Common Stock issued under your Award will be endorsed with appropriate legends determined by the Company in substantially the following forms (in addition to any other legend that may be required by other agreements between you and the Company):

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A REACQUISITION RIGHT AND OTHER RESTRICTIONS AND CONDITIONS SET FORTH IN A RESTRICTED STOCK AWARD AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL CORPORATE OFFICES. ANY TRANSFER OR ATTEMPTED TRANSFER OF ANY SHARES SUBJECT TO SUCH RIGHT IS VOID WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF THE COMPANY."

(b) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AS TO THE SECURITIES UNDER SAID ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED."

(c) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RIGHTS OF REFUSAL GRANTED TO THE COMPANY AND/OR ITS ASSIGNEE(S) AND ACCORDINGLY MAY NOT BE SOLD, ASSIGNED, TRANSFERRED, ENCUMBERED OR IN ANY MANNER DISPOSED OF EXCEPT IN CONFORMITY WITH THE TERMS OF THE BYLAWS OF THE COMPANY AND/OR A RESTRICTED STOCK AWARD AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL CORPORATE OFFICES."

(d) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED IN THE BYLAWS OF THE COMPANY."

(e) Any legend required by appropriate blue sky officials.

12. Investment Representations. In connection with your acquisition of the Common Stock under your Award, you represent to the Company the following:

(a) You are aware of the Company's business affairs and financial condition and have acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. You are acquiring the Shares for investment for your 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) You understand that the Shares have 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 your investment intent as expressed in this Award Agreement.

(c) You further acknowledge and understand that the Shares must be held indefinitely unless the Shares are subsequently registered under the Securities Act or an exemption from such registration is available. You further acknowledge and understand that the Company is under no obligation to register the Common Stock. You understand 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) You are familiar with the provisions of Rule 701 and Rule 144 promulgated under the Securities Act ("***Rule 144***"), 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 Exchange Act, the securities exempt under Rule 701 may be sold by you 90 days thereafter, subject to the satisfaction of certain of the conditions specified by Rule 144 and by the agreement(s) relating to the Lock-Up Period.

(e) In the event that the sale of the Shares does not qualify under Rule 701 at the time of issuance, then the Shares may be resold by you 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 you have purchased, and made full payment of (within the meaning of Rule 144), the securities to be sold.

(f) You further understand that at the time you wish to sell the Shares, 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, you would be precluded from selling the Shares under Rule 144 or 701 even if the minimum holding period requirement had been satisfied.

13. Withholding Obligations.

(a) At the time your Award is made, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with your Award (the "Withholding Taxes"). The Company may, in its sole discretion, satisfy all or any portion of the Withholding Taxes obligation relating to your Award by any of the following means or by a combination of such means: (i) withholding from any amounts otherwise payable to you by the Company; (ii) causing you to tender a cash payment; or (iii) withholding Shares issued or otherwise issuable to you in connection with the Award with a Fair Market Value equal to the amount of such Withholding Taxes; *provided*, *however*, that the number of such Shares withheld may not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income.

(b) Unless the tax withholding obligations of the Company and any Affiliate are satisfied, the Company will have no obligation to issue a certificate for such Shares or release such Shares from any escrow provided for in this Award Agreement.

14. Tax Consequences. You agree to review with your own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Award. You will rely solely on such advisors and not on any statements or representations of the Company or any of its agents. You understand that you (and not the Company) will be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Award. You understand that Section 83 of the Code taxes as ordinary income to you the fair market value of the Shares issued to you pursuant to the Award as of the date any restrictions on such shares lapse (that is, as of the date on which part or all of such shares vest). In this context, "restriction" includes the right of the Company to reacquire the Shares pursuant to the Reacquisition Right set forth above. You understand that you may elect to be taxed at the time the Shares are issued to you pursuant to your Award, rather than when and as the Reacquisition Right expires, by filing an election under Section 83(b) of the Code (an "***83(b) Election***")

with the Internal Revenue Service within 30 days after the date your acquire Shares pursuant to your Award. Even if the fair market value of the Common Stock at the time of grant of your Award equals the amount paid for the Shares (if anything), the 83(b) Election must be made to avoid income under Section 83(a) in the future. You understand that failure to file such an 83(b) Election in a timely manner may result in adverse tax consequences for you. You acknowledge that the foregoing is only a summary of the effect of U.S. federal income taxation with respect to issuance of the Shares pursuant to your Award, and does not purport to be complete. You further acknowledge that the Company has directed you to seek independent advice regarding the applicable provisions of the Code, the income tax laws of any municipality, state or foreign country in which you may reside, and the tax consequences of your death. You assume all responsibility for filing an 83(b) Election and paying all taxes resulting from such election or the lapse of the restrictions on the Shares. **YOU ACKNOWLEDGE THAT IT IS YOUR OWN RESPONSIBILITY, AND NOT THE COMPANY'S, TO FILE A TIMELY 83(b) ELECTION. THE COMPANY AND ITS LEGAL COUNSEL CANNOT ASSUME RESPONSIBILITY FOR FAILURE TO FILE THE 83(b) ELECTION IN A TIMELY MANNER UNDER ANY CIRCUMSTANCES.**

15. Severability. If all or any part of this Award Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Award Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

16. Governing Law. The interpretation, performance and enforcement of this Award Agreement shall be governed by the law of the State of Delaware without regard to that state's conflicts of laws rules.

17. Notices. Any notice or request required or permitted hereunder will be given in writing to each of the other parties hereto and will be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed to the Company at its primary executive offices, attention: Stock Plan Administrator, and addressed to you at your address as on file with the Company at the time notice is given.

18. Imposition of Other Requirements. As a condition to the grant of your Award or to the Company's the issuance of any Shares under this Award, the Company may require you to execute further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award. In addition, you may be required to execute certain customary agreements entered into with the holders of capital stock of the Company, including without limitation a right of first refusal and co-sale agreement, stockholders agreement and a voting agreement.

EXHIBIT A TO
RESTRICTED STOCK AWARD TERMS AND CONDITIONS

ASSIGNMENT SEPARATE FROM CERTIFICATE

For Value Received and pursuant to that certain Restricted Stock Award Grant Notice dated _____ (the "***Award***"), **[**Participant's Name**]** hereby sells, assigns and transfers unto **Longboard Pharmaceuticals, Inc.**, a Delaware corporation (the "***Company***") _____ shares of the 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 the Company's Secretary as attorney-in-fact to transfer the said Common Stock on the books of the Company with full power of substitution in the premises. This Assignment Separate From Certificate may be used only in accordance with and subject to the terms and conditions of the Award, in connection with the reacquisition of shares of Common Stock of the Company issued to the undersigned pursuant to the Award, and only to the extent that such shares remain subject to the Company's Reacquisition Right under the Award.

Dated:_____

_____
(Signature)

_____
(Print Name)

Instructions: Please do not fill in any blanks other than the "Signature" line and the "Print Name" line.

EXHIBIT B TO
RESTRICTED STOCK AWARD TERMS AND CONDITIONS
JOINT ESCROW INSTRUCTIONS

Secretary
Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Dear Sir or Madam:

As Escrow Agent for both **Longboard Pharmaceuticals, Inc.**, a Delaware corporation (the "***Company***"), and the undersigned recipient ("***Recipient***") of Common Stock of the Company (the "***Common Stock***"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Restricted Stock Award Grant Notice (including all attachments and exhibits) dated September __, 2020 (the "***Award***"), to which a copy of these Joint Escrow Instructions is attached as Exhibit B to the Restricted Stock Award Terms and Conditions (the "***Agreement***", in accordance with the following instructions:

1. In the event Recipient ceases to render services to the Company or an affiliate of the Company during the vesting period set forth in the Grant Notice, the Company or its affiliate or assignee, as applicable, will give to Recipient and you a written notice specifying the number of shares of Common Stock that will be transferred to the Company. Recipient 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 any stock assignments necessary for the transfer in question, (b) to fill in the number of shares of Common Stock being transferred, and (c) to deliver the same, together with the certificate evidencing the shares of Common Stock to be transferred, to the Company.

3. Recipient irrevocably authorizes the Company to deposit with you any certificates evidencing shares of Common Stock to be held by you hereunder and any additions and substitutions to said shares of Common Stock as specified in the Grant Notice and the Agreement. Recipient does hereby irrevocably constitute and appoint you as Recipient's attorney-in-fact and agent for the term of this escrow to execute with respect to such securities and other property all documents of assignment and/or transfer and all stock certificates necessary or appropriate to make all securities negotiable and complete any transaction herein contemplated.

4. This escrow will terminate and the shares of Common Stock held hereunder will be released in full upon the full vesting of the shares of Common Stock in accordance with the vesting schedule set forth in the Grant Notice or upon the earlier return of the shares of Common Stock to the Company pursuant to the Company's Reacquisition Right (as defined in the Agreement) or other forfeiture condition under the Company's 2020 Equity Incentive Plan.

5. If at the time of termination of this escrow you should have in your possession any documents, securities, or other property belonging to Recipient, you will deliver all of same to Recipient 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 the 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 will be obligated only for the performance of such duties as are specifically set forth herein and may rely and will be 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 or their assignees. You will not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Recipient while acting in good faith and any act done or omitted by you pursuant to the advice of your own attorneys will be 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 corporation, 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 will not be 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 will not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Grant Notice, the Agreement or any documents or papers deposited or called for hereunder.

10. You will not be 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 will 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 Recipient hereby confirms the appointment of such successor as Recipient'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, 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. Any notice or request required or permitted hereunder will be given in writing to each of the other parties hereto and will be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed to each of the other parties hereunto entitled at the following addresses, or at such other addresses as a party may designate by 10 days' advance written notice to each of the other parties hereto:

Company: Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Attn: General Counsel / Chief Financial Officer

Recipient: _____
_____
_____
_____

Escrow Agent: Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Attn: Corporate 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 Grant Notice or the Agreement.

16. You are entitled to employ such legal counsel, including without limitation Cooley LLP, and other experts as you may deem necessary to advise you in connection with your obligations hereunder. You may rely upon the advice of such counsel, and may pay such counsel reasonable compensation therefor. The Company will be responsible for all fees generated by such legal counsel in connection with your obligations hereunder.

17. This instrument will be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns. It is understood and agreed that references to "you" or "your" herein refer to the original Escrow Agent 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 Grant Notice, the Agreement and these Joint Escrow Instructions in whole or in part.

[Remainder of page intentionally left blank]

18. These Joint Escrow Instructions will be governed by and interpreted and determined in accordance with the laws of the State of Delaware without regard to that state's conflicts of laws rules. 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,

Longboard Pharmaceuticals, Inc.

By _____

Title _____

Recipient

_____

(Signature)

_____

(Print Name)

Escrow Agent:

_____

(Signature)

_____

(Print Name)

ATTACHMENT II

2020 EQUITY INCENTIVE PLAN

ATTACHMENT III

SECTION 83(B) ELECTION

[This Form is designed for Individual purchasers. Corporate or Trust purchasers should contact their Tax Professional to review before submitting.]

Instructions for Filing Section 83(b) Election

Attached is a form of election under Section 83(b) of the Internal Revenue Code and an accompanying IRS cover letter. Please complete and sign the election and cover letter, then proceed as follows:

a) Make **three** copies of the completed election form and one copy of the IRS cover letter.

b) Send the **original** signed election form and cover letter, the copy of the cover letter, and a self-addressed stamped return envelope to the Internal Revenue Service Center where you would otherwise file your tax return.[1] Even if an address for an Internal Revenue Service Center is already included in the forms below, it is your obligation to verify such address. This can be done by searching for the term "where to file" on www.irs.gov or by calling 1 (800) 829-1040.

Sending the election via certified mail, requesting a return receipt, with the certified mail number written on the cover letter is also recommended.

c) Deliver one copy of the completed election form to the Company.

d) Applicable state law may require that you attach a copy of the completed election form to your state personal income tax return(s) when you file it for the year (assuming you file a state personal income tax return).[2]

Please consult your personal tax advisor(s) to determine whether or not a copy of this Section 83(b) election should be filed with your state personal income tax return(s).

e) Retain one copy of the completed election form for your personal permanent records.

Note: An additional copy of the completed election form must be delivered to the transferee (recipient) of the property if the service provider and the transferee are not the same person.

Please note that the election must be filed with the IRS within 30 days of the date of purchase/grant of the shares. Failure to file within that time will render the election void and you may recognize ordinary taxable income as your vesting restrictions lapse. The Company and its counsel cannot assume responsibility for failure to file the election in a timely manner under any circumstances.

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1 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. As of September 2018 if you live in a foreign country or are a dual status alien (foreigners that will have lived both in their home country and the United States during the year in which they make the election) you should send the 83(b) election to Austin, TX 73301-0215. You can verify this is still the correct address at: http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 .

2 ***Note***: Pursuant to Treasury Regulations finalized in July 2016 (Treas. Reg. § 1.83-2(c); T.D. 9779), taxpayers are no longer required to submit a copy of a Code Sec. 83(b) election with their ***federal*** personal income tax returns for the year in which the property subject to the election was transferred. However, you are strongly encouraged to retain a copy of the completed election form and the IRS filed-stamped copy of your cover letter along with a copy of the federal personal income tax return for the year in which the property subject to the election was transferred for your personal permanent records in case you ever need to demonstrate proper and timely filing (a common requirement imposed by acquirers in M&A transactions).

SECTION 83(b) ELECTION

_____, 20_

Department of the Treasury
Internal Revenue Service
[City, State Zip][3][Austin, TX 73301-0215
USA][4]
Re: Election Under Section 83(b)

Ladies and Gentlemen:

The undersigned taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended, to include in gross income as compensation for services the excess (if any) of the fair market value of the shares described below over the amount paid for those shares. The following information is supplied in accordance with Treasury Regulation § 1.83-2:

1. **The name, [social security number][taxpayer identification number], address of the undersigned, and the taxable year for which this election is being made are:**
   Name: _____
   [Social Security Number][Tax Identification Number]: _____ [5]
   Address: _____
   _____
   Taxable year: Calendar year _____.[6]

2. **The property that is the subject of this election:** [#] shares of common stock of Longboard Pharmaceuticals, Inc., a Delaware corporation (the "***Company***").

3. **The property was transferred on:** [●].

4. **The property is subject to the following restrictions:** Some or all of the shares are subject to forfeiture or repurchase at less than their fair market value if the undersigned does not continue to provide services for the Company for a designated period of time. The risk of forfeiture or repurchase lapses over a specified vesting period.

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3 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. Assuming these are individual taxpayers who would file a Form 1040, see http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 . Use the address in the row which includes the state in which the service provider lives and in the column entitled "And you ARE NOT enclosing a payment".

4 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. As of December 2018, if you live in a foreign country or are a dual status alien (foreigners that will have lived both in their home country and the United States during the year in which they make the election) you should send the 83(b) election to Austin, TX 73301-0215. You can verify this is still the correct address at:
http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 .

5 ***Note***: If you are not a US taxpayer and do not have a taxpayer ID number (TIN), put "None –non-US taxpayer" and include in the cover letter to the IRS a statement explaining that the Section 83(b) election is being filed because the individual may become a US taxpayer before the stock vests. If the individual is applying for a TIN, instead include "applied for" and enclose a copy of the W-7 application. Note that there may be important factors to consider before applying for a TIN, including immigration status, etc.

6 ***Note***: If an entity is the service provider, instead use "Fiscal year ending ___."

5. **The fair market value of the property at the time of transfer (determined without regard to any restriction other than a nonlapse restriction as defined in Treasury Regulation § 1.83-3(h)):** $[●] per share x [#] shares = $[●].

6. **For the property transferred, the undersigned paid:** $[●] per share x [#] shares = $[●].

7. **The amount to include in gross income is:** $[●].[7]

The undersigned taxpayer will file this election with the Internal Revenue Service office with which taxpayer files his or her annual income tax return not later than 30 days after the date of transfer of the property. A copy of the election also will be furnished to the person for whom the services were performed and the transferee of the property. Additionally, the undersigned will include a copy of the election with his or her income tax return for the taxable year in which the property is transferred. The undersigned is the person performing the services in connection with which the property was transferred.

Very truly yours,

_____

[Name]

7 ***Note***: This should equal the amount in Item 5 minus the amount in Item 6, and in many cases will be $0.00.

RETURN SERVICE REQUESTED

Department of the Treasury
Internal Revenue Service
[City, State, ZIP][Austin, TX 73301-0215
USA]

Re: **Election Under Section 83(b) of the Internal Revenue Code**

Dear Sir or Madam:

Enclosed please find an executed form of election under Section 83(b) of the Internal Revenue Code of 1986, as amended, filed with respect to an interest in Longboard Pharmaceuticals, Inc.

[Please note, the undersigned does not currently have a Tax Identification Number because the undersigned is not a U.S. taxpayer, but may become a U.S. resident before the stock vests.]

Also enclosed is a copy of the signed form of election under Section 83(b). Please acknowledge receipt of these materials by marking the copy when received and returning it in the enclosed stamped, self-addressed envelope.

Thank you very much for your assistance.

Very truly yours,

_____

[Name]

Enclosures

LONGBOARD PHARMACEUTICALS, INC.

RESTRICTED STOCK AWARD GRANT NOTICE
(2020 EQUITY INCENTIVE PLAN)

Longboard Pharmaceuticals, Inc. (the "***Company***"), pursuant to its 2020 Equity Incentive Plan (the "***Plan***"), hereby awards to Participant the right to purchase the number of shares of Common Stock (the "***Shares***") set forth below (the "***Award***"). The Award is subject to all of the terms and conditions as set forth in this Restricted Stock Award Grant Notice (the "***Grant Notice***") and the attached Restricted Stock Award Terms and Conditions (together with the Grant Notice, the "***Award Agreement***"), and the Plan, all of which are attached to this Grant Notice and incorporated into this Grant Notice in their entirety. Capitalized terms not explicitly defined in the Award Agreement but defined in the Plan will have the meanings provided in the Plan. If the Company uses an electronic capitalization table system (such as Carta or Shareworks) and the fields below are blank or the information is otherwise provided in a different format electronically, the blank fields and other information (such as exercise schedule and type of grant) shall be deemed to come from the electronic capitalization system and is considered part of this Grant Notice.

Participant:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Award:	_____
Purchase Price per Share:	_____
Total Purchase Price:	_____
Consideration:	Cash, check or wire transfer

Vesting Schedule: [**Sample of standard vesting.** 12/48ths of the total shares will vest on the one-year anniversary of the Vesting Commencement Date, and 1/48th of the total shares will vest each month thereafter on the same day of the month as the Vesting Commencement Date (or if there is no corresponding day, on the last day of the month), subject to Participant's Continuous Service as of each such date].

Additional Terms/Acknowledgements: Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Award subject to all of the terms and provisions of the Plan and this Award Agreement (including all attachments and exhibits) and has had an opportunity to obtain the advice of counsel prior to executing and accepting the Award. By accepting this Award, Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under the Plan or this Award.

Participant further consents to receive any documents related to the Plan by electronic delivery and to participate in the Plan through an online or electronic system established and maintained by the Company or a third party designated by the Company.

Participant further acknowledges that as of the Date of Grant, this Award Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the acquisition of stock in the Company and supersede all prior oral and written agreements on that subject, with the exception of (i) options, restricted stock awards or other compensatory stock awards previously granted and delivered to Participant, and (ii) any written employment or severance arrangement that would provide for vesting acceleration of this Award upon the terms and conditions set forth therein.

Participant further acknowledges that this Award 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, Participant in any capacity. Participant has been provided with an opportunity to consult with Participant's own counsel with respect to this Award Agreement.

This Award may be executed in one 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, Uniform Electronic Transactions Act or other applicable law) 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.

Longboard Pharmaceuticals, Inc.

By: _____
Signature

Title: _____

Date: _____

Participant:

_____
Signature

Date: _____

Attachments:

Attachment I:	Restricted Stock Award Terms and Conditions
Exhibit A:	Assignment Separate from Certificate
Exhibit B :	Joint Escrow Instructions
Attachment II:	2020 Equity Incentive Plan
Attachment III:	Section 83(b) Election

ATTACHMENT I

RESTRICTED STOCK AWARD TERMS AND CONDITIONS

LONGBOARD PHARMACEUTICALS, INC.

(2020 EQUITY INCENTIVE PLAN)

RESTRICTED STOCK AWARD TERMS AND CONDITIONS

Longboard Pharmaceuticals, Inc. (the "***Company***") has awarded you the right to purchase the number of Shares indicated in the Grant Notice (the "***Award***") pursuant to its 2020 Equity Incentive Plan (the "***Plan***"). The Grant Notice and these Restricted Stock Award Terms and Conditions are collectively referred to as the "***Award Agreement***". Capitalized terms not explicitly defined in this Agreement but defined in the Plan will have the same meanings given to them in the Plan.

The details of your Award, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. Agreement to Purchase; Closing. You agree to purchase from the Company, and the Company agrees to sell to you, the aggregate number of shares of Common Stock specified in your Grant Notice at the specified Purchase Price per Share. You may not purchase less than the aggregate number of shares specified in the Grant Notice. You may purchase the shares by delivering the Total Purchase Price referenced in your Grant Notice to the Secretary of the Company, or to such other person as the Company may designate, during regular business hours, within 30 days following the Date of Grant specified in the Grant Notice (or at such other time and place as you and the Company may mutually agree upon in writing) along with the documents referenced in Section 2 below and such additional documents as the Company may then require.

2. Escrow of Shares. As security for your faithful performance of the terms of this Award Agreement and to ensure the availability for delivery of the Unvested Shares upon exercise of the Repurchase Right, you agree that the Shares will be held in escrow pursuant to the terms of the Joint Escrow Instructions attached to this Agreement as **Exhibit B**. You agree to execute and deliver to the individual designated as the escrow agent in the Joint Escrow Instructions or person's designee (the "***Escrow Agent***"), (i) the Joint Escrow Instructions and (ii) two Assignment Separate From Certificate forms duly endorsed (with date and number of shares blank) substantially in the form attached to this Agreement as **Exhibit A** and deliver the same, along with the certificate or certificates evidencing the Unvested Shares, which will be held and used by the Escrow Agent pursuant to the terms of the Joint Escrow Instructions.

3. Vesting. Subject to the limitations contained herein, the Shares will vest pursuant to the Vesting Schedule in the Grant Notice, provided that vesting will cease upon the termination of your Continuous Service. "***Vested Shares***" will mean Shares that have vested in accordance with the Vesting Schedule, and "***Unvested Shares***" will mean Shares that have not vested in accordance with the Vesting Schedule.

4. Capitalization Adjustments. The number of Shares subject to your Award may be adjusted from time to time for Capitalization Adjustments. In the event of any such Capitalization Adjustments, new, substituted or additional securities or other property to which you are entitled by reason of your ownership of the Unvested Shares will be immediately subject to the same vesting requirements and vesting schedule that is applicable to the Shares with respect to which such additional Shares relate, as well as all transfer restrictions contained in this Award Agreement, including the Repurchase Right, the Right of First Refusal and the Lock-Up Period (each as defined below). No fractional shares or rights for fractional shares will be created pursuant to this Section. Any fraction of a share will be rounded down to the nearest whole share.

5. Securities Law Compliance. The Shares are not registered under the Securities Act. At this time, the Company has determined that the issuance of the Shares under this Award is exempt from the registration requirements of the Securities Act. If the Company determines at any time that an exemption from the registration requirements of the Securities Act was not available or that the issuance of the Shares otherwise would not comply with any other applicable laws and regulations, then the Company will not be obligated to issue the Shares or may rescind the award to you.

6. Transfer Restrictions. In addition to any other limitation on transfer created by the Company's bylaws and applicable securities laws, you may not Transfer all or any part of the Unvested Shares or any interest in the Unvested Shares while such shares are subject to the Repurchase Right (as defined below) or continue to be held by the Escrow Agent (as defined below) or by the Company's transfer agent in restricted book entry form. In the case of Vested Shares, you may not Transfer the Vested Shares or any interest in the Vested Shares except in compliance with this Award Agreement, including without limitation the Right of First Refusal (as defined below), the Company's bylaws and applicable securities laws. As used in this Award Agreement, the term "***Transfer***" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided*, *however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family. In such case, the transferee or other recipient will receive and hold the Shares so transferred subject to the provisions of this Award Agreement, and there will be no further transfer of such shares except in accordance with the terms of this Award Agreement. The term "***Immediate Family***" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

7. Unvested Share Repurchase Right.

(a) Repurchase Right. In the event your Continuous Service terminates, the Company will have an irrevocable option (the "***Repurchase Right***") for a period of ninety (90) days after the termination of your Continuous Service, or such longer period as may be agreed to by you and the Company, to repurchase from you or your personal representative, as the case may be, any and all Unvested Shares as of such termination date.

(b) Shares Repurchasable at the Lower of your Original Purchase Price or Fair Market Value. The Company may repurchase all or any of the Unvested Shares at a price equal to the lower of your Purchase Price for such shares as indicated on your Grant Notice or the Fair Market Value of the Unvested Shares on the date of repurchase.

(c) Exercise of Repurchase Right. Unless the Company notifies you within 90 days from the date of termination of your Continuous Service that it does not intend to exercise the Repurchase Right with respect to some or all of the Unvested Shares, the Repurchase Right shall be deemed automatically exercised by the Company as of the 90th day following such termination, provided that the Company may notify you that it is exercising the Repurchase Right as of a date prior to such 90th day. Unless you are otherwise notified by the Company pursuant to the preceding sentence that the Company does not intend to exercise the Repurchase Right as to some or all of the Unvested Shares to which it applies at the time of termination, execution of this Agreement by you constitutes written notice to you of the Company's intention to exercise the Repurchase Right with respect to all Unvested Shares to which the Repurchase Right applies. The Company, at its election, may satisfy its payment obligation to you with respect to exercise of the Repurchase Right by either (A) delivering a check to you in the amount of the purchase price for the Unvested Shares being repurchased, or (B) in the event you are indebted to the Company, canceling an amount of such indebtedness equal to the purchase price for the Unvested Shares being repurchased, or (C) by a combination of (A) and (B) so that the combined payment and cancellation

of indebtedness equals such purchase price. In the event of any deemed automatic exercise of the Repurchase Right pursuant to this Section in which you are indebted to the Company, such indebtedness equal to the purchase price of the Unvested Shares being repurchased shall be deemed automatically canceled as of the 90th day following termination of your Continuous Service unless the Company otherwise satisfies its payment obligations. As a result of any repurchase of Unvested Shares pursuant to this Section, the Company will become the legal and beneficial owner of the Unvested Shares being repurchased and all rights and interests in and related to such shares, and the Company will have the right to transfer to its own name the Unvested Shares being repurchased by the Company, without further action by you. Notwithstanding anything to the contrary in this Section or in this Award Agreement, the Company may elect to waive, in its sole discretion, its Repurchase Right in whole or in part by providing written notice to you (with a copy to the Escrow Agent), at any time prior to the expiration of the Repurchase Right, and the Escrow Agent may then release to you the number of Shares not being repurchased by the Company.

(d) Corporate Transactions. To the extent the Repurchase Right remains in effect following a Corporate Transaction or Change in Control, unless otherwise provided by the Board pursuant to the terms of the Plan, it will apply to the new capital stock, cash or other property received in exchange for the Unvested Shares in consummation of the Corporate Transaction or Change in Control, as applicable, but only to the extent the Unvested Shares were at the time covered by such right.

(e) Termination of Repurchase Right. The Company's Repurchase Right will terminate upon the earlier of (i) the Company's reacquisition in full of the Unvested Shares (or waiver of the Repurchase Right) and (ii) the expiration of the Repurchase Right.

8. Right of First Refusal. Shares that are received under your Award are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however,* that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below (the "***Right of First Refusal***") will apply. The Right of First Refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "***Listing Date***").

(a) Prior to the Listing Date, you may not validly Transfer any Shares received under the Award, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any Shares or any interest therein, the record holder of the Shares to be transferred (the "***Offered Shares***") will give written notice (by registered or certified mail) to the Company (the "***ROFR Notice***"). Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "***Notice Date***" and the record holder of the Offered Shares will be hereinafter referred to as the "***Offeror***."

(ii) For a period of 30 calendar days after the Notice Date, the Company will have the option to exercise its Right of First Refusal and purchase all or any portion of the Offered Shares at the purchase price and on the terms set forth in this Section. In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30 days.

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the ROFR Notice), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the Company elects not to exercise its Right of First Refusal as to the Offered Shares, the Transfer proposed in the ROFR Notice may take place; *provided*, *however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the 10th calendar day after the expiration of the 30 day option exercise period or after the 90th calendar day after the expiration of the 30 day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section.

(b) None of the shares of Common Stock received under the Award will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section have been complied with in all respects. The certificates of stock evidencing Shares received under the Award will bear an appropriate legend referring to the transfer restrictions imposed by this Section.

9. Lock-Up Period. By accepting your Award, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with applicable FINRA rules (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this Section will prevent the exercise of a reacquisition or repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect to the foregoing covenant. You also agree that any transferee of any other shares of Common Stock (or other securities) of the Company held by you will be bound by this Section. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The underwriters of the Company's stock are intended third party beneficiaries of this Section and will have the right, power and authority to enforce the provisions of this Section as though they were a party to this Award Agreement. You further agree that the obligations contained in this Section 8 shall also, if so determined by the Company's Board of Directors, apply in the Company's initial listing of its Common Stock on a national securities exchange by means of a registration statement on Form S-1 under the Securities Act (or any successor registration form under the Securities Act subsequently adopted by the Securities and Exchange Commission) filed by the Company with the Securities and Exchange Commission that registers shares of existing capital stock of the Company for resale (a "***Direct Listing***") (and, for avoidance of doubt, the Lock-Up Period shall be deemed to include the period following the Direct Listing during which the restrictions under this Section 8 apply) provided that all holders of at least 5% of the Company's outstanding Common Stock (after giving effect to the conversion into Common Stock of any outstanding Preferred Stock of the Company) are subject to substantially similar obligations with respect to such Direct Listing.

10. Rights as Stockholder.

(a) General. Subject to the provisions of this Award Agreement, you will exercise all rights and privileges of a stockholder of the Company with respect to the Shares, including for purposes of exercising any voting rights relating to any Unvested Shares.

(b) Dividends. You will be deemed to be the holder of the Unvested Shares for purposes of receiving any dividends that may be paid with respect to such Shares; *provided, however*, that any dividends or other distributions paid with respect to the Unvested Shares shall be subject to all of the terms and conditions applicable under this Award Agreement to the same extent as the Unvested Shares. For clarity, cash dividends made prior to the vesting of any Unvested Shares will be withheld and paid to you (without interest) only if, when and to the extent, such Shares become Vested Shares.

11. Waiver of Information Rights. You hereby acknowledge and agree that, except for such information as required to be delivered to you by the Company pursuant to any other agreement by and between you and the Company, you shall have no right to receive any information from the Company by virtue of your purchase of the Shares, ownership of the Shares, or as a result of you being a holder of record of stock of the Company. Without limiting the foregoing, to the fullest extent permitted by law, you hereby waive your inspection rights under Section 220 of the Delaware General Corporation Law and all such similar information and/or inspection rights that may be provided under the law of any jurisdiction, or any federal, state or foreign regulation, that are, or may become, applicable to the Company, the Company's capital stock or the Shares (the "***Inspection Rights***"). You hereby covenant and agree never to directly or indirectly commence, voluntarily aid in any way, prosecute, assign, transfer, or cause to be commenced any claim, action, cause of action, or other proceeding to pursue or exercise the Inspection Rights.

12. Restrictive Legends. All certificates representing the Common Stock issued under your Award will be endorsed with appropriate legends determined by the Company in substantially the following forms (in addition to any other legend that may be required by other agreements between you and the Company):

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A REPURCHASE RIGHT AND OTHER RESTRICTIONS AND CONDITIONS SET FORTH IN A RESTRICTED STOCK AWARD AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL CORPORATE OFFICES. ANY TRANSFER OR ATTEMPTED TRANSFER OF ANY SHARES SUBJECT TO SUCH RIGHT IS VOID WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF THE COMPANY."

(b) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AS TO THE SECURITIES UNDER SAID ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED."

(c) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RIGHTS OF REFUSAL GRANTED TO THE COMPANY AND/OR ITS ASSIGNEE(S) AND ACCORDINGLY MAY NOT BE SOLD, ASSIGNED, TRANSFERRED, ENCUMBERED OR IN ANY MANNER DISPOSED OF EXCEPT IN CONFORMITY WITH THE TERMS OF THE BYLAWS OF THE COMPANY AND/OR A RESTRICTED STOCK AWARD AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL CORPORATE OFFICES."

(d) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED IN THE BYLAWS OF THE COMPANY."

(e) Any legend required by appropriate blue sky officials.

13. Investment Representations. In connection with your acquisition of the Common Stock under your Award, you represent to the Company the following:

(a) You are aware of the Company's business affairs and financial condition and have acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. You are acquiring the Shares for investment for your 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) You understand that the Shares have 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 your investment intent as expressed in this Award Agreement.

(c) You further acknowledge and understand that the Shares must be held indefinitely unless the Shares are subsequently registered under the Securities Act or an exemption from such registration is available. You further acknowledge and understand that the Company is under no obligation to register the Common Stock. You understand 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) You are familiar with the provisions of Rule 701 and Rule 144 promulgated under the Securities Act ("***Rule 144***"), 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 Exchange Act, the securities exempt under Rule 701 may be sold by you 90 days thereafter, subject to the satisfaction of certain of the conditions specified by Rule 144 and by the agreement(s) relating to the Lock-Up Period.

(e) In the event that the sale of the Shares does not qualify under Rule 701 at the time of issuance, then the Shares may be resold by you 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 you have purchased, and made full payment of (within the meaning of Rule 144), the securities to be sold.

(f) You further understand that at the time you wish to sell the Shares, 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, you would be precluded from selling the Shares under Rule 144 or 701 even if the minimum holding period requirement had been satisfied.

14. Withholding Obligations.

(a) At the time your Award is made, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with your Award (the "***Withholding Taxes***"). The Company may, in its sole discretion, satisfy all or any portion of the Withholding Taxes obligation relating to your Award by any of the following means or by a combination of such means: (i) withholding from any amounts otherwise payable to you by the Company; (ii) causing you to tender a cash payment; or (iii) withholding Shares issued or otherwise issuable to you in connection with the Award with a Fair Market Value equal to the amount of such Withholding Taxes; *provided*, *however*, that the number of such Shares withheld may not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income.

(b) Unless the tax withholding obligations of the Company and any Affiliate are satisfied, the Company will have no obligation to issue a certificate for such Shares or release such Shares from any escrow provided for in this Award Agreement.

15. Tax Consequences. You agree to review with your own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Award. You will rely solely on such advisors and not on any statements or representations of the Company or any of its agents. You understand that you (and not the Company) will be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Award. You understand that Section 83 of the Code taxes as ordinary income to you the fair market value of the Shares issued to you pursuant to the Award as of the date any restrictions on such shares lapse (that is, as of the date on which part or all of such shares vest). In this context, "restriction" includes the right of the Company to reacquire the Shares pursuant to the Repurchase Right set forth above. You understand that you may elect to be taxed at the time the Shares are issued to you pursuant to your Award, rather than when and as the Repurchase Right expires, by filing an election under Section 83(b) of the Code (an "***83(b) Election***") with the Internal Revenue Service within 30 days after the date your acquire Shares pursuant to your Award. Even if the fair market value of the Common Stock at the time of grant of your Award equals the amount paid for the Shares (if anything), the 83(b) Election must be made to avoid income under Section 83(a) in the future. You understand that failure to file such an 83(b) Election in a timely manner may result in adverse tax consequences for you. You acknowledge that the foregoing is only a summary of the effect of U.S. federal income taxation with respect to issuance of the Shares pursuant to your Award, and does not purport to be complete. You further acknowledge that the Company has directed you to seek independent advice regarding the applicable provisions of the Code, the income tax laws of any municipality, state or foreign country in which you may reside, and the tax consequences of your death. You assume all responsibility for filing an 83(b) Election and paying all taxes resulting from such election or the lapse of the restrictions on the Shares. YOU ACKNOWLEDGE THAT IT IS YOUR OWN RESPONSIBILITY, AND NOT THE COMPANY'S, TO FILE A TIMELY 83(b) ELECTION. THE COMPANY AND ITS LEGAL COUNSEL CANNOT ASSUME RESPONSIBILITY FOR FAILURE TO FILE THE 83(b) ELECTION IN A TIMELY MANNER UNDER ANY CIRCUMSTANCES.

16. Severability. If all or any part of this Award Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Award Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

17. Governing Law. The interpretation, performance and enforcement of this Award Agreement shall be governed by the law of the State of Delaware without regard to that state's conflicts of laws rules.

18. Notices. Any notice or request required or permitted hereunder will be given in writing to each of the other parties hereto and will be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed to the Company at its primary executive offices, attention: Stock Plan Administrator, and addressed to you at your address as on file with the Company at the time notice is given.

19. Imposition of Other Requirements. As a condition to the grant of your Award or to the Company's the issuance of any Shares under this Award, the Company may require you to execute further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award. In addition, you may be required to execute certain customary agreements entered into with the holders of capital stock of the Company, including without limitation a right of first refusal and co-sale agreement, stockholders agreement and a voting agreement.

EXHIBIT A TO
RESTRICTED STOCK AWARD TERMS AND CONDITIONS

ASSIGNMENT SEPARATE FROM CERTIFICATE

For Value Received and pursuant to that certain Restricted Stock Award Grant Notice dated _____ (the "***Award***"), [Participant's Name] hereby sells, assigns and transfers unto **Longboard Pharmaceuticals, Inc.**, a Delaware corporation (the "***Company***") _____ shares of the 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 the Company's Secretary as attorney-in-fact to transfer the said Common Stock on the books of the Company with full power of substitution in the premises. This Assignment Separate From Certificate may be used only in accordance with and subject to the terms and conditions of the Award, in connection with the repurchase of shares of Common Stock of the Company issued to the undersigned pursuant to the Award, and only to the extent that such shares remain subject to the Company's Repurchase Right under the Award.

Dated: _____

_____
(Signature)

_____
(Print Name)

Instructions: Please do not fill in any blanks other than the "Signature" line and the "Print Name" line.

EXHIBIT B TO
RESTRICTED STOCK AWARD TERMS AND CONDITIONS
JOINT ESCROW INSTRUCTIONS

Secretary
Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Dear Sir or Madam:

As Escrow Agent for both **Longboard Pharmaceuticals, Inc.**, a Delaware corporation (the "***Company***"), and the undersigned recipient ("***Recipient***") of Common Stock of the Company (the "***Common Stock***"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Restricted Stock Award Grant Notice (including all attachments and exhibits) dated September __, 2020 (the "***Award***"), to which a copy of these Joint Escrow Instructions is attached as Exhibit B to the Restricted Stock Award Terms and Conditions (the "***Agreement***", in accordance with the following instructions:

1. In the event Recipient ceases to render services to the Company or an affiliate of the Company during the vesting period set forth in the Grant Notice, the Company or its affiliate or assignee, as applicable, will give to Recipient and you a written notice specifying the number of shares of Common Stock that will be transferred to the Company. Recipient 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 any stock assignments necessary for the transfer in question, (b) to fill in the number of shares of Common Stock being transferred, and (c) to deliver the same, together with the certificate evidencing the shares of Common Stock to be transferred, to the Company.

3. Recipient irrevocably authorizes the Company to deposit with you any certificates evidencing shares of Common Stock to be held by you hereunder and any additions and substitutions to said shares of Common Stock as specified in the Grant Notice and the Agreement. Recipient does hereby irrevocably constitute and appoint you as Recipient's attorney-in-fact and agent for the term of this escrow to execute with respect to such securities and other property all documents of assignment and/or transfer and all stock certificates necessary or appropriate to make all securities negotiable and complete any transaction herein contemplated.

4. This escrow will terminate and the shares of Common Stock held hereunder will be released in full upon the full vesting of the shares of Common Stock in accordance with the vesting schedule set forth in the Grant Notice or upon the earlier return of the shares of Common Stock to the Company pursuant to the Company's Repurchase Right (as defined in the Agreement) or other forfeiture condition under the Company's 2020 Equity Incentive Plan.

5. If at the time of termination of this escrow you should have in your possession any documents, securities, or other property belonging to Recipient, you will deliver all of same to Recipient 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 the 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 will be obligated only for the performance of such duties as are specifically set forth herein and may rely and will be 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 or their assignees. You will not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Recipient while acting in good faith and any act done or omitted by you pursuant to the advice of your own attorneys will be 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 corporation, 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 will not be 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 will not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Grant Notice, the Agreement or any documents or papers deposited or called for hereunder.

10. You will not be 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 will 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 Recipient hereby confirms the appointment of such successor as Recipient'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, 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. Any notice or request required or permitted hereunder will be given in writing to each of the other parties hereto and will be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed to each of the other parties hereunto entitled at the following addresses, or at such other addresses as a party may designate by 10 days' advance written notice to each of the other parties hereto:

Company: Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Attn: General Counsel / Chief Financial Officer

Recipient: _____
_____
_____
_____

Escrow Agent: Longboard Pharmaceuticals, Inc.
6154 Nancy Ridge Drive
San Diego, California 92121

Attn: Corporate 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 Grant Notice or the Agreement.

16. You are entitled to employ such legal counsel, including without limitation Cooley LLP, and other experts as you may deem necessary to advise you in connection with your obligations hereunder. You may rely upon the advice of such counsel, and may pay such counsel reasonable compensation therefor. The Company will be responsible for all fees generated by such legal counsel in connection with your obligations hereunder.

17. This instrument will be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns. It is understood and agreed that references to "you" or "your" herein refer to the original Escrow Agent 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 Grant Notice, the Agreement and these Joint Escrow Instructions in whole or in part.

[Remainder of page intentionally left blank]

18. These Joint Escrow Instructions will be governed by and interpreted and determined in accordance with the laws of the State of Delaware without regard to that state's conflicts of laws rules. 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,

Longboard Pharmaceuticals, Inc.

By _____

Title _____

Recipient

_____

(Signature)

_____

(Print Name)

Escrow Agent:

_____

(Signature)

_____

(Print Name)

ATTACHMENT II

2020 EQUITY INCENTIVE PLAN

ATTACHMENT III

SECTION 83(B) ELECTION

[This Form is designed for Individual purchasers. Corporate or Trust purchasers should contact their Tax Professional to review before submitting.]

Instructions for Filing Section 83(b) Election

Attached is a form of election under Section 83(b) of the Internal Revenue Code and an accompanying IRS cover letter. Please complete and sign the election and cover letter, then proceed as follows:

a) Make **three** copies of the completed election form and one copy of the IRS cover letter.

b) Send the **original** signed election form and cover letter, the copy of the cover letter, and a self-addressed stamped return envelope to the Internal Revenue Service Center where you would otherwise file your tax return.[1] Even if an address for an Internal Revenue Service Center is already included in the forms below, it is your obligation to verify such address. This can be done by searching for the term "where to file" on www.irs.gov or by calling 1 (800) 829-1040.

Sending the election via certified mail, requesting a return receipt, with the certified mail number written on the cover letter is also recommended.

c) Deliver one copy of the completed election form to the Company.

d) Applicable state law may require that you attach a copy of the completed election form to your state personal income tax return(s) when you file it for the year (assuming you file a state personal income tax return).[2]

Please consult your personal tax advisor(s) to determine whether or not a copy of this Section 83(b) election should be filed with your state personal income tax return(s).

e) Retain one copy of the completed election form for your personal permanent records.

Note: An additional copy of the completed election form must be delivered to the transferee (recipient) of the property if the service provider and the transferee are not the same person.

Please note that the election must be filed with the IRS within 30 days of the date of purchase/grant of the shares. Failure to file within that time will render the election void and you may recognize ordinary taxable income as your vesting restrictions lapse. The Company and its counsel cannot assume responsibility for failure to file the election in a timely manner under any circumstances.

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1 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. As of September 2018 if you live in a foreign country or are a dual status alien (foreigners that will have lived both in their home country and the United States during the year in which they make the election) you should send the 83(b) election to Austin, TX 73301-0215. You can verify this is still the correct address at: http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 .

2 ***Note***: Pursuant to Treasury Regulations finalized in July 2016 (Treas. Reg. § 1.83-2(c); T.D. 9779), taxpayers are no longer required to submit a copy of a Code Sec. 83(b) election with their ***federal*** personal income tax returns for the year in which the property subject to the election was transferred. However, you are strongly encouraged to retain a copy of the completed election form and the IRS filed-stamped copy of your cover letter along with a copy of the federal personal income tax return for the year in which the property subject to the election was transferred for your personal permanent records in case you ever need to demonstrate proper and timely filing (a common requirement imposed by acquirers in M&A transactions).

SECTION 83(b) ELECTION

_____, 20_

Department of the Treasury
Internal Revenue Service
[City, State Zip][3][Austin, TX 73301-0215
USA][4]
Re: Election Under Section 83(b)

Ladies and Gentlemen:

The undersigned taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended, to include in gross income as compensation for services the excess (if any) of the fair market value of the shares described below over the amount paid for those shares. The following information is supplied in accordance with Treasury Regulation § 1.83-2:

1. **The name, [social security number][taxpayer identification number], address of the undersigned, and the taxable year for which this election is being made are:**
   Name: _____
   [Social Security Number][Tax Identification Number]: _____ [5]
   Address: _____
   Taxable year: Calendar year _____.[6]

2. **The property that is the subject of this election:** [#] shares of common stock of Longboard Pharmaceuticals, Inc., a Delaware corporation (the "***Company***").

3. **The property was transferred on: [●].**

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3 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. Assuming these are individual taxpayers who would file a Form 1040, see http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 . Use the address in the row which includes the state in which the service provider lives and in the column entitled "And you ARE NOT enclosing a payment".

4 ***Note***: Per Treasury Regulation § 1.83-2(c), the Section 83(b) election must be filed with the IRS office where the person otherwise files his or her tax return. As of December 2018, if you live in a foreign country or are a dual status alien (foreigners that will have lived both in their home country and the United States during the year in which they make the election) you should send the 83(b) election to Austin, TX 73301-0215. You can verify this is still the correct address at: http://www.irs.gov/uac/Where-to-File-Addresses-for--Taxpayers-and--Tax-Professionals-Filing-Form-1040 .

5 ***Note***: If you are not a US taxpayer and do not have a taxpayer ID number (TIN), put "None –non-US taxpayer" and include in the cover letter to the IRS a statement explaining that the Section 83(b) election is being filed because the individual may become a US taxpayer before the stock vests. If the individual is applying for a TIN, instead include "applied for" and enclose a copy of the W-7 application. Note that there may be important factors to consider before applying for a TIN, including immigration status, etc.

6 ***Note***: If an entity is the service provider, instead use "Fiscal year ending ___."

4. **The property is subject to the following restrictions:** Some or all of the shares are subject to forfeiture or repurchase at less than their fair market value if the undersigned does not continue to provide services for the Company for a designated period of time. The risk of forfeiture or repurchase lapses over a specified vesting period.

5. **The fair market value of the property at the time of transfer (determined without regard to any restriction other than a nonlapse restriction as defined in Treasury Regulation § 1.83-3(h)):** $[●] per share x [#] shares = $[●].

6. **For the property transferred, the undersigned paid:** $[●] per share x [#] shares = $[●].

7. **The amount to include in gross income is:** $[●].[7]

The undersigned taxpayer will file this election with the Internal Revenue Service office with which taxpayer files his or her annual income tax return not later than 30 days after the date of transfer of the property. A copy of the election also will be furnished to the person for whom the services were performed and the transferee of the property. Additionally, the undersigned will include a copy of the election with his or her income tax return for the taxable year in which the property is transferred. The undersigned is the person performing the services in connection with which the property was transferred.

Very truly yours,

_____

[Name]

7 ***Note***: This should equal the amount in Item 5 minus the amount in Item 6, and in many cases will be $0.00.

RETURN SERVICE REQUESTED

Department of the Treasury
Internal Revenue Service
[City, State, ZIP][Austin, TX 73301-0215
USA]

Re: **Election Under Section 83(b) of the Internal Revenue Code**

Dear Sir or Madam:

Enclosed please find an executed form of election under Section 83(b) of the Internal Revenue Code of 1986, as amended, filed with respect to an interest in Longboard Pharmaceuticals, Inc.

[Please note, the undersigned does not currently have a Tax Identification Number because the undersigned is not a U.S. taxpayer, but may become a U.S. resident before the stock vests.]

Also enclosed is a copy of the signed form of election under Section 83(b). Please acknowledge receipt of these materials by marking the copy when received and returning it in the enclosed stamped, self-addressed envelope.

Thank you very much for your assistance.

Very truly yours,

_____

[Name]

Enclosures

LONGBOARD PHARMACEUTICALS, INC.
2021 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 28, 2021
APPROVED BY THE STOCKHOLDERS: MARCH 5, 2021

TABLE OF CONTENTS

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the Effective Time, (i) no additional awards may be granted under any of the Prior Plan; (ii) the Prior Plan's Available Reserve plus any Returning Shares will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding awards granted under the Prior Plan will remain subject to the terms of the Prior Plan (except to the extent such outstanding awards result in Returning Shares that become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.

(b) Plan Purpose. The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) Adoption Date; Effective Time. The Plan will come into existence on the Adoption Date, but no Award may be granted prior to the Effective Time.

2. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to adjustment in accordance with Section 2(c) and any adjustments as necessary to implement any Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed 2,834,232 shares, which number is the sum of:

(i) 1,766,699 new shares (which includes the Prior Plan's Available Reserve); and

(ii) up to 1,067,533 Returning Shares as such shares become available from time to time.

In addition, subject to any adjustments as necessary to implement any Capitalization Adjustments, such aggregate number of shares of Common Stock will automatically increase on January 1st of each year for a period of ten years commencing on January 1, 2022 and ending on (and including) January 1, 2031, in an amount equal to 5% of the total number of shares of Common Stock, outstanding on December 31st of the preceding year (determined on an as-converted to Common Stock basis, without regard to any limitations on the conversion of the Non-Voting Common); provided, however that the Board may act prior to January 1st of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock.

(b) Aggregate Incentive Stock Option Limit. Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustments as necessary to implement any

Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 8,833,495 shares.

(c) Share Reserve Operation.

(i) Limit Applies to Common Stock Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(ii) Actions that Do Not Constitute Issuance of Common Stock and Do Not Reduce Share Reserve. The following actions do not result in an issuance of shares under the Plan and accordingly do not reduce the number of shares subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued, (2) the settlement of any portion of an Award in cash (*i.e.*, the Participant receives cash rather than Common Stock), (3) the withholding of shares that would otherwise be issued by the Company to satisfy the exercise, strike or purchase price of an Award; or (4) the withholding of shares that would otherwise be issued by the Company to satisfy a tax withholding obligation in connection with an Award.

(iii) Reversion of Previously Issued Shares of Common Stock to Share Reserve. The following shares of Common Stock previously issued pursuant to an Award and accordingly initially deducted from the Share Reserve will be added back to the Share Reserve and again become available for issuance under the Plan: (1) any shares that are forfeited back to or repurchased by the Company because of a failure to meet a contingency or condition required for the vesting of such shares; (2) any shares that are reacquired by the Company to satisfy the exercise, strike or purchase price of an Award; and (3) any shares that are reacquired by the Company to satisfy a tax withholding obligation in connection with an Award.

3. ELIGIBILITY AND LIMITATIONS.

(a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.

(b) Specific Award Limitations.

(i) Limitations on Incentive Stock Option Recipients. Incentive Stock Options may be granted only to Employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and (f) of the Code).

(ii) Incentive Stock Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds $100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (i) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (ii) the Option is not exercisable after the expiration of five years from the date of grant of such Option.

(iv) Limitations on Nonstatutory Stock Options and SARs. Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company (as such term is defined in Rule 405) unless the stock underlying such Awards is treated as "service recipient stock" under Section 409A because the Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Awards otherwise comply with the distribution requirements of Section 409A.

(c) Aggregate Incentive Stock Option Limit. The aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is the number of shares specified in Section 2(b).

(d) Non-Employee Director Compensation Limit. The limitations in this Section 3(d) shall apply commencing with the first applicable period that begins following the IPO. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any calendar year, including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed (i) $750,000 in total value or (ii) in the event such Non-Employee Director is first appointed or elected to the Board during such calendar year, $1,500,000 in total value, in each case calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes.

4. OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; provided, however, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; provided, however, that each Option Agreement and SAR Agreement will conform (through

incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) Term. Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) Exercise or Strike Price. Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.

(c) Exercise Procedure and Payment of Exercise Price for Options. In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a "cashless exercise" program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) at the time of exercise the Common Stock is publicly traded, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay

the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) Exercise Procedure and Payment of Appreciation Distribution for SARs. In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) Transferability. Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided, further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; provided, however, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant's request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) Vesting. The Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

(g) Termination of Continuous Service for Cause. Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than Cause. Subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common

Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions); provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(j) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Corporate Transaction in which such Award is not assumed, continued or substituted, (iii) a Change in Control, or (iv) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares. Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. AWARDS OTHER THAN OPTIONS AND STOCK APPRECIATION RIGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board; provided, however, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

(1) RSAs: To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) RSUs: A RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of a RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares

of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) Consideration.

(1) RSA: A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of consideration (including future services) as the Board may determine and permissible under Applicable Law.

(2) RSU: Unless otherwise determined by the Board at the time of grant, a RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.

(iii) Vesting. The Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iv) Termination of Continuous Service. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (i) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and (ii) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(v) Dividends and Dividend Equivalents. Dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to a Restricted Stock Award or RSU Award, as determined by the Board and specified in the Award Agreement).

(vi) Settlement of RSU Awards. A RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form

of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) Performance Awards. With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board.

(c) Other Awards. Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value at the time of grant) may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan and the maximum number of shares by which the Share Reserve may annually increase pursuant to Section 2(a), (ii) the class(es) and maximum number of shares that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(a), and (iii) the class(es) and number of securities and exercise price, strike price or purchase price of Common Stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock shall be created in order to implement any Capitalization Adjustment. The Board shall determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that might be created by the adjustments referred to in the preceding provisions of this Section.

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service, provided, however, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of an Award.

(i) Awards May Be Assumed. In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar award for only a portion of an Award, or may choose to assume or continue the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) Awards Held by Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the "***Current Participants***"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Corporate Transaction (contingent upon the effectiveness of the Corporate Transaction) as the Board determines (or, if the Board does not determine such a date, to the date that is five (5) days prior to the effective time of the Corporate Transaction), and such 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 the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Corporate Transaction). With respect to the vesting of Performance Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and that have multiple vesting levels depending on the level of performance, unless otherwise provided in the Award Agreement, the vesting of such Performance Awards will accelerate at 100% of the target level upon the occurrence of the Corporate Transaction. With respect to the vesting of Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Corporate Transaction.

(iii) Awards Held by Persons other than Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, such Awards will terminate if not exercised (if applicable) prior to the occurrence of the Corporate Transaction;

provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(iv) Payment for Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event an Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (2) any exercise price payable by such holder in connection with such exercise.

(d) Appointment of Stockholder Representative. As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.

(e) No Restriction on Right to Undertake Transactions. The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in subsection (c) below.

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; (6) the Fair Market Value applicable to an Award; and (7) the terms of any Performance

Award that is not valued in whole or in part by reference to, or otherwise based on, the Common Stock, including the amount of cash payment or other property that may be earned and the timing of payment.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Corporate Transaction, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vii) To amend the Plan in any respect the Board deems necessary or advisable; provided, however, that stockholder approval will be required for any amendment to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be Materially Impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that, a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant foreign jurisdiction).

(xii) To effect, at any time and from time to time, subject to the consent of any Participant whose Award is Materially Impaired by such action, (1) the reduction of the exercise price (or strike price) of any outstanding Option or SAR; (2) the cancellation of any outstanding Option or SAR and the grant in substitution therefor of (A) a new Option, SAR, Restricted Stock Award, RSU Award or Other Award, under the Plan or another equity plan of the Company, covering the same or a different number of shares of Common Stock, (B) cash and/or (C) other valuable consideration (as determined by the Board); or (3) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revest in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Delegation to an Officer. The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law,

other types of Awards) and, to the extent permitted by Applicable Law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; provided, however, that the resolutions or charter adopted by the Board or any Committee evidencing such delegation will specify the total number of shares of Common Stock that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the applicable form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

8. TAX WITHHOLDING

(a) Withholding Authorization. As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate provision for (including), any sums required to satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations of the Company or an Affiliate, if any, which may arise in connection with the grant, exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.

(b) Satisfaction of Withholding Obligation. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local and/or foreign tax or social insurance withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a “cashless exercise” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board, or (vi) by such other method as may be set forth in the Award Agreement.

(c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law the Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of

the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the "fair market value" of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise price or strike price is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

(d) Withholding Indemnification. As a condition to accepting an Award under the Plan, in the event that the amount of the Company's and/or its Affiliate's withholding obligation in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount.

9. MISCELLANEOUS.

(a) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(b) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(c) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(d) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(e) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or

an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(f) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(g) Execution of Additional Documents. As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(h) Electronic Delivery and Participation. Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(i) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law and any clawback policy that the Company

otherwise adopts, to the extent applicable and permissible under Applicable Law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntary terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(j) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(k) Transfer or Assignment of Awards; Issued Shares. Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(l) Effect on Other Employee Benefit Plans. The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(m) Deferrals. To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals by will be made in accordance with the requirements of Section 409A.

(n) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are

publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(o) CHOICE OF LAW. This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

10. COVENANTS OF THE COMPANY.

(a) Compliance with Law. The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. ADDITIONAL RULES FOR AWARDS SUBJECT TO SECTION 409A.

(a) Application. Unless the provisions of this Section of the Plan are expressly superseded by the provisions in the form of Award Agreement, the provisions of this Section shall apply and shall supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) Non-Exempt Awards Subject to Non-Exempt Severance Arrangements. To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of this subsection (b) apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant's Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any

later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date, or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant's Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant's Separation from Service in accordance with the terms of the Non-Exempt Severance Arrangement, but in no event later than the 60th day that follows the date of the Participant's Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of such Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant's Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award shall not accelerate the issuance date of the shares, but the shares shall instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant's Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under Treasury Regulations Section 1.409A-3(a)(4).

(c) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Employees and Consultants. The provisions of this subsection (c) shall apply and shall supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Corporate Transaction if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) Vested Non-Exempt Awards. The following provisions shall apply to any Vested Non-Exempt Award in connection with a Corporate Transaction:

(1) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change in Control the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control.

(2) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-

Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Corporate Transaction.

(ii) Unvested Non-Exempt Awards. The following provisions shall apply to any Unvested Non-Exempt Award unless otherwise determined by the Board pursuant to subsection (e) of this Section.

(1) In the event of a Corporate Transaction, the Acquiring Entity shall assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of any Unvested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Corporate Transaction.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Corporate Transaction, then such Award shall automatically terminate and be forfeited upon the Corporate Transaction with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Corporate Transaction, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in subsection (e)(ii) below. In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award shall be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Corporate Transaction.

(3) The foregoing treatment shall apply with respect to all Unvested Non-Exempt Awards upon any Corporate Transaction, and regardless of whether or not such Corporate Transaction is also a Section 409A Change in Control.

(d) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Non-Employee Directors. The following provisions of this subsection (d) shall apply and shall supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Corporate Transaction.

(i) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change in Control the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control pursuant to the preceding provision.

(ii) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of the Non-Exempt Director Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Corporate Transaction.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 11(e) shall apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award shall not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Change in Control or Corporate Transaction, to the extent it is required for compliance with the requirements of Section 409A, the Change in Control or Corporate Transaction event triggering settlement must also constitute a Section 409A Change in Control. To the extent the terms of a Non-Exempt Award provides that it will be settled upon a termination of employment or termination of Continuous Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also constitute a Separation From Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a "separation from service" such Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date

that is six months following the date of the Participant's Separation From Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iv) The provisions in this subsection (e) for delivery of the shares in respect of the settlement of a RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

12. SEVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. TERMINATION OF THE PLAN.

The Board may suspend or terminate the Plan at any time.

No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the date the Plan is approved by the Company's stockholders.

No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

14. DEFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

(a) "***Acquiring Entity***" means the surviving or acquiring corporation (or its parent company) in connection with a Corporate Transaction.

(b) "***Adoption Date***" means the date the Plan is first approved by the Board or Compensation Committee.

(c) "***Affiliate***" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(d) "***Applicable Law***" means any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).

(e) "***Award***" means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a RSU Award, a SAR, a Performance Award or any Other Award).

(f) "***Award Agreement***" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided to a Participant along with the Grant Notice.

(g) "***Board***" means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.

(h) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Effective Time without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor

thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(i) "***Cause***" has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (iii) such Participant's intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company or such Participant's significant violation of any Company policy; (iv) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; (v) such Participant's material failure or refusal to perform Participant's employment duties or to comply with reasonable directions of the Board (or Participant's supervisor) for a period of thirty (30) days following receipt of notice from the Board (or Participant's supervisor) of such failure to perform or comply; (vi) such Participant's engaging in conduct that has resulted or could reasonably result in significant economic, reputational or other harm do the Company; or (vii) such Participant's gross misconduct. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are executive officers of the Company and by the Company's Chief Executive Officer with respect to Participants who are not executive officers of the Company. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(j) "***Change in Control***" or "***Change of Control***" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events; provided, however, to the extent necessary to avoid adverse personal income tax consequences to the Participant in connection with an Award, also constitutes a Section 409A Change in Control:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the "*Subject Person*") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the

Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur, except for a liquidation into a parent corporation;

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(v) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "***Incumbent Board***") cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board; provided, however, that, for this purpose, no individual initially elected or nominated as a member of the Board as a result of an actual or threatened election contest with respect to Board membership or as a result of any other actual or threatened solicitation of proxies by or on behalf of any person other than the Board shall be deemed to be an Incumbent Director.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply.

(k) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(l) "***Committee***" means the Compensation Committee and any other committee of Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.

(m) "***Common Stock***" means the Company's Voting Common Stock.

(n) "***Company***" means Longboard Pharmaceuticals, Inc., a Delaware corporation.

(o) "***Compensation Committee***" means the Compensation Committee of the Board.

(p) "***Consultant***" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

(q) "***Continuous Service***" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of "separation from service" as defined under Treasury Regulation Section 1.409A-1(h) (without regard to any alternative definition thereunder).

(r) "***Corporate Transaction***" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(s) "***Director***" means a member of the Board.

(t) "***determine*** **or** "***determined***" means as determined by the Board or the Committee (or its designee) in its sole discretion.

(u) "***Disability***" means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(v) "***Effective Time***" means the IPO, provided this Plan is approved by the Company's stockholders prior to the IPO.

(w) "***Employee***" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(x) "***Employer***" means the Company or the Affiliate of the Company that employs the Participant.

(y) "***Entity***" means a corporation, partnership, limited liability company or other entity.

(z) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(aa) "***Exchange Act Person***" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such

securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Time, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.

(bb) "***Fair Market Value***" means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(cc) "***Governmental Body***" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).

(dd) "***Grant Notice***" means the notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(ee) "***Incentive Stock Option***" means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

(ff) "***IPO***" means the execution of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(gg) "***Materially Impair***" means any amendment to the terms of the Award that materially adversely affects the Participant's rights under the Award. A Participant's rights under an Award will not be deemed to have been Materially Impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights. For example, the following types of amendments to the terms of an Award do not Materially Impair the Participant's rights under the Award: (i) imposition of reasonable restrictions on the minimum number of shares subject to an Option that may be exercised, (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) to change the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.

(hh) "***Non-Employee Director***" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("***Regulation S-K***")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(ii) "***Non-Exempt Award***" means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, (ii) the terms of any Non-Exempt Severance Agreement.

(jj) "***Non-Exempt Director Award***" means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(kk) "***Non-Exempt Severance Arrangement***" means a severance arrangement or other agreement between the Participant and the Company that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant's termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder) ("***Separation from Service***") and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(ll) "***Nonstatutory Stock Option***" means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.

(mm) "***Non-Voting Common***" means the Company's Non-Voting Common Stock.

(nn) "***Officer***" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(oo) "***Option***" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(pp) "***Option Agreement***" means a written agreement between the Company and the Optionholder evidencing the terms and conditions of the Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.

(qq) "***Optionholder***" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(rr) "***Other Award***" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).

(ss) "***Other Award Agreement***" means a written agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(tt) "***Own,***" "***Owned,***" "***Owner,***" "***Ownership***" means that a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(uu) "***Participant***" means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(vv) "***Performance Award***" means an Award that may vest or may be exercised or a cash award that may vest or become earned and paid contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b) pursuant to such terms as are approved by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. 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, the Common Stock.

(ww) "***Performance Criteria***" means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board or Committee: earnings (including earnings per share and net earnings); earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; total stockholder return; return on equity or average stockholder's equity; return on assets, investment, or capital employed; stock price;

margin (including gross margin); income (before or after taxes); operating income; operating income after taxes; pre-tax profit; operating cash flow; sales or revenue targets; increases in revenue or product revenue; expenses and cost reduction goals; improvement in or attainment of working capital levels; economic value added (or an equivalent metric); market share; cash flow; cash flow per share; share price performance; debt reduction; customer satisfaction; stockholders' equity; capital expenditures; debt levels; operating profit or net operating profit; workforce diversity; growth of net income or operating income; billings; pre-clinical development related compound goals; financing; regulatory milestones, including approval of a compound; stockholder liquidity; corporate governance and compliance; product commercialization; intellectual property; personnel matters; progress of internal research or clinical programs; progress of partnered programs; partner satisfaction; budget management; clinical achievements; completing phases of a clinical study (including the treatment phase); announcing or presenting preliminary or final data from clinical studies; in each case, whether on particular timelines or generally; timely completion of clinical trials; submission of INDs and NDAs and other regulatory achievements; partner or collaborator achievements; internal controls, including those related to the Sarbanes-Oxley Act of 2002; research progress, including the development of programs; investor relations, analysts and communication; manufacturing achievements (including obtaining particular yields from manufacturing runs and other measurable objectives related to process development activities); strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property; establishing relationships with commercial entities with respect to the marketing, distribution and sale of the Company's products (including with group purchasing organizations, distributors and other vendors); supply chain achievements (including establishing relationships with manufacturers or suppliers of active pharmaceutical ingredients and other component materials and manufacturers of the Company's products); co-development, co-marketing, profit sharing, joint venture or other similar arrangements; individual performance goals; (lix) corporate development and planning goals; and other measures of performance selected by the Board or Committee.

(xx) "***Performance Goals***" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company 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; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement or the written terms of a Performance Cash Award.

(yy) "***Performance Period***" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(zz) "***Plan***" means this Longboard Pharmaceuticals, Inc. 2021 Equity Incentive Plan.

(aaa) "***Plan Administrator***" means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company's other equity incentive programs.

(bbb) "***Post-Termination Exercise Period***" means the period following termination of a Participant's Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(h).

(ccc) "***Prior Plan's Available Reserve***" means the number of shares available for the grant of new awards under the Prior Plan as of immediately prior to the Effective Time.

(ddd) "***Prior Plan***" means the Longboard Pharmaceuticals, Inc. 2020 Equity Incentive Plan.

(eee) "***Prospectus***" means the document containing the Plan information specified in Section 10(a) of the Securities Act.

(fff) "***Restricted Stock Award***" or "***RSA***" means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(ggg) "***Restricted Stock Award Agreement***" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(hhh) "***Returning Shares***" means shares subject to outstanding stock awards granted under the Prior Plan and that following the Effective Time: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares; (D) are withheld or reacquired to satisfy the exercise, strike or purchase price; or (E) are withheld or reacquired to satisfy a tax withholding obligation.

(iii) "***RSU Award***" or "***RSU***" means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(jjj) "***RSU Award Agreement***" means a written agreement between the Company and a holder of a RSU Award evidencing the terms and conditions of a RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(kkk) "***Rule 16b-3***" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(lll) "***Rule 405***" means Rule 405 promulgated under the Securities Act.

(mmm) "***Section 409A***" means Section 409A of the Code and the regulations and other guidance thereunder.

(nnn) "***Section 409A Change in Control***" means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company's assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(ooo) "***Securities Act***" means the Securities Act of 1933, as amended.

(ppp) "***Share Reserve***" means the number of shares available for issuance under the Plan as set forth in Section 2(a).

(qqq) "***Stock Appreciation Right***" or "***SAR***" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.

(rrr) "***SAR Agreement***" means a written agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided to a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan.

(sss) "***Subsidiary***" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(ttt) "***Ten Percent Stockholder***" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(uuu) "***Trading Policy***" means the Company's policy permitting certain individuals to sell Company shares only during certain "window" periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(vvv) "***Unvested Non-Exempt Award***" means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Corporate Transaction.

(www) "***Vested Non-Exempt Award***" means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Corporate Transaction.

LONGBOARD PHARMACEUTICALS, INC.
STOCK OPTION GRANT NOTICE
(2021 EQUITY INCENTIVE PLAN)

Longboard Pharmaceuticals, Inc. (the "***Company***"), pursuant to its 2021 Equity Incentive Plan (the "***Plan***"), has granted to you ("***Optionholder"***) an option to purchase the number of shares of the Common Stock set forth below (the "***Option***"). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares of Common Stock Subject to Option:	_____
Exercise Price (Per Share):	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: **[**Incentive Stock Option] OR [Nonstatutory Stock Option]

Exercise and VestingSchedule: Subject to the Optionholder's Continuous Service through each applicable vesting date, the Option will vest as follows:

[1/4th of the shares vest and become exercisable one year after the Vesting Commencement Date; the balance of the shares vest and become exercisable in a series of thirty-six (36) successive equal monthly installments measured from the first anniversary of the Vesting Commencement Date on the same date of the month as the Vesting Commencement Date.]

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the "***Option Agreement***") may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first *exercisable* for more than $100,000 in value (measured by exercise price) in any calendar year. Any excess over $100,000 is a Nonstatutory Stock Option.
- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.

- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- 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.

LONGBOARD PHARMACEUTICALS, INC.

By: _____
Signature

Title: _____

Date: _____

OPTIONHOLDER:

_____
Signature

Date: _____

ATTACHMENTS: Stock Option Agreement, 2021 Equity Incentive Plan, Notice of Exercise

ATTACHMENT I

STOCK OPTION AGREEMENT

LONGBOARD PHARMACEUTICALS, INC.
2021 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

As reflected by your Stock Option Grant Notice ("***Grant Notice***") Longboard Pharmaceuticals, Inc. (the "***Company***") has granted you an option under its 2021 Equity Incentive Plan (the "***Plan***") to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the "***Option***"). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company's retained rights to terminate your Continuous Service notwithstanding the grant of the Option; and

(c) Section 8(c) regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING. Your Option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon the termination of your Continuous Service.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(b)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a "cashless exercise" program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan; or

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement as further described in Section 4(c)(iv) of the Plan.

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 3(c). The underwriters of the Company's stock are intended third party beneficiaries of this Section 3(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

(c) 12 months after the termination of your Continuous Service due to your Disability;

(d) 18 months after your death if you die during your Continuous Service;

(e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,

(f) the Expiration Date indicated in your Grant Notice; or

(g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) eighteen months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

7. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

8. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a

provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the "fair market value" of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

10. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid

11. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

12. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

*** * * ***

ATTACHMENT II

2021 EQUITY INCENTIVE PLAN

ATTACHMENT III

NOTICE OF EXERCISE

LONGBOARD PHARMACEUTICALS, INC.

(2021 EQUITY INCENTIVE PLAN)

NOTICE OF EXERCISE

LONGBOARD PHARMACEUTICALS, INC.
6154 Nancy Ridge Drive
San Diego, California 92121

Date of Exercise: _____

This constitutes notice to Longboard Pharmaceuticals, Inc. (the "***Company***") that I elect to purchase the below number of shares of Common Stock of the Company (the "***Shares***") by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Grant Notice, Option Agreement or 2021 Equity Incentive Plan (the "***Plan***") shall have the meanings set forth in the Grant Notice, Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Option Agreement and the Plan.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Date of Grant:	_____	
Number of Shares as to which Option is exercised:	_____	
Certificates to be issued in name of:	_____	
Total exercise price:	$_____	
Cash, check, bank draft or money order delivered herewith:	$_____	
Value of _____ Shares delivered herewith:	$_____	
Regulation T Program (cashless exercise)	$_____	
Value of _____ Shares pursuant to net exercise:	$_____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to

the exercise of this Option as set forth in the Option Agreement, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company that I hold, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this paragraph will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. I further agree that in order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to shares of Common Stock that I hold until the end of such period. I also agree that any transferee of any shares of Common Stock (or other securities) of the Company that I hold will be bound by this paragraph. The underwriters of the Company's stock are intended third party beneficiaries of this paragraph and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

Very truly yours,

_____

LONGBOARD PHARMACEUTICALS, INC.

2021 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 28, 2021
APPROVED BY THE STOCKHOLDERS: MARCH 5, 2021

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan. In addition, the Plan permits the Company to grant a series of Purchase Rights to Eligible Employees that do not meet the requirements of an Employee Stock Purchase Plan.

(b) The Plan includes two components: a 423 Component and a Non-423 Component. The Company intends (but makes no undertaking or representation to maintain) the 423 Component to qualify as an Employee Stock Purchase Plan. The provisions of the 423 Component, accordingly, will be construed in a manner that is consistent with the requirements of Section 423 of the Code. Except as otherwise provided in the Plan or determined by the Board, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

(c) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board or the Committee will administer the Plan. References herein to the Board shall be deemed to refer to the Committee except where context dictates otherwise.

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time (A) which Related Corporations of the Company will be eligible to participate in the Plan, (B) whether such Related Corporations will participate in the 423 Component or the Non-423 Component, and (C) to the extent that the Company makes separate Offerings under the 423 Component, in which Offering the Related Corporations in the 423 Component will participate.

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan with respect to the 423 Component.

(viii) To adopt such rules, procedures and sub-plans as are necessary or appropriate to permit or facilitate participation in the Plan by Employees who are foreign nationals or employed or located outside the United States. Without limiting the generality of, and consistent with, the foregoing, the Board specifically is authorized to adopt rules, procedures, and sub-plans regarding, without limitation, eligibility to participate in the Plan, the definition of eligible "earnings," handling and making of Contributions, establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of share issuances, any of which may vary according to applicable requirements, and which, if applicable to a Related Corporation designated for participation in the Non-423 Component, do not have to comply with the requirements of Section 423 of the Code.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan and any Offering Document to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 353,339 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1 following the year in which the IPO Date occurs and ending on (and including) January 1, 2031, in an amount equal to the lesser of (i) 1% of the total number of shares of Common Stock outstanding on December 31st of the preceding calendar year (determined on an as-converted to Common Stock basis, without regard to any limitations on the conversion of the Non-Voting Common), and (ii) such number of shares of Common Stock that would cause the aggregate number of shares of Common Stock then reserved for issuance under the ESPP to not exceed 1,060,017 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For the avoidance of doubt, up to the maximum number of shares of Common Stock reserved under this Section 3(a) may be used to satisfy purchases of Common Stock under the 423 Component and any

remaining portion of such maximum number of shares may be used to satisfy purchases of Common Stock under the Non-423 Component.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and, with respect to the 423 Component, will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b) or as required by Applicable Law, an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may (unless prohibited by law) provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code with respect to the 423 Component. The Board may also exclude from participation in the

Plan or any Offering Employees who are "highly compensated employees" (within the meaning of Section 423(b)(4)(D) of the Code) of the Company or a Related Corporation or a subset of such highly compensated employees.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which, when aggregated, exceeds US $25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may (unless prohibited by law) provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

(f) Notwithstanding anything in this Section 5 to the contrary, in the case of an Offering under the Non-423 Component, an Eligible Employee (or group of Eligible Employees) may be excluded from participation in the Plan or an Offering if the Board has determined, in its sole discretion, that participation of such Eligible Employee(s) is not advisable or practical for any reason.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock

purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock (rounded down to the nearest whole share) available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:

(i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or

(ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to participate in an Offering and authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where Applicable Law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If required under Applicable Law or if specifically provided in the Offering, in addition to or instead of making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash, check or wire transfer prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute as soon as practicable to such Participant all of his or her accumulated but unused Contributions and such Participant's

Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Unless otherwise required by Applicable Law, Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute as soon as practicable to such individual all of his or her accumulated but unused Contributions.

(d) Unless otherwise determined by the Board, a Participant whose employment transfers or whose employment terminates with an immediate rehire (with no break in service) by or between the Company and a Related Corporation that has been designated for participation in the Plan will not be treated as having terminated employment for purposes of participating in the Plan or an Offering; however, if a Participant transfers from an Offering under the 423 Component to an Offering under the Non-423 Component, the exercise of the Participant's Purchase Right will be qualified under the 423 Component only to the extent such exercise complies with Section 423 of the Code. If a Participant transfers from an Offering under the Non-423 Component to an Offering under the 423 Component, the exercise of the Purchase Right will remain non-qualified under the Non-423 Component. The Board may establish different and additional rules governing transfers between separate Offerings within the 423 Component and between Offerings under the 423 Component and Offerings under the Non-423 Component.

(e) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(f) Unless otherwise specified in the Offering or as required by Applicable Law, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) Unless otherwise provided in the Offering, if any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest (unless otherwise required by Applicable Law).

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable U.S. federal and state, foreign and other securities, exchange control and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 27 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and

the Plan is not in material compliance with all Applicable Laws, as determined by the Company in its sole discretion, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest (unless the payment of interest is otherwise required by Applicable Law).

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each U.S. federal or state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder unless the Company determines, in its sole discretion, that doing so would cause the Company to incur costs that are unreasonable. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions, without interest (unless the payment of interest is otherwise required by Applicable Law), to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock (rounded down to the nearest

whole share) within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by Applicable Law.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code with respect to the 423 Component or with respect to other Applicable Laws. Notwithstanding anything in the Plan or any Offering Document to the contrary, the Board will be entitled to: (i) establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars; (ii) permit Contributions in excess of the amount designated by a Participant in order to adjust for mistakes in the Company's processing of properly completed Contribution elections; (iii) establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts withheld from the Participant's Contributions; (iv) amend any outstanding Purchase Rights or clarify any ambiguities regarding the terms of any Offering to enable the Purchase Rights to qualify under and/or comply with Section 423 of the Code with respect to the 423 Component; and (v) establish other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan. The actions of the Board pursuant to this paragraph will not be considered to alter or impair any Purchase Rights granted under an Offering as they are part of the initial terms of each Offering and the Purchase Rights granted under each Offering.

13. TAX QUALIFICATION; TAX WITHHOLDING.

(a) Although the Company may endeavor to (i) qualify a Purchase Right for special tax treatment under the laws of the United States or jurisdictions outside of the United States or (ii) avoid adverse tax treatment, the Company makes no representation to that effect and expressly disavows any covenant to maintain special or to avoid unfavorable tax treatment, notwithstanding anything to the contrary in this Plan. The Company will be unconstrained in its corporate activities without regard to the potential negative tax impact on Participants.

(b) Each Participant will make arrangements, satisfactory to the Company and any applicable Related Corporation, to enable the Company or the Related Corporation to fulfill any withholding obligation for Tax-Related Items. Without limitation to the foregoing, in the Company's sole discretion and subject to Applicable Law, such withholding obligation may be satsified in whole or in part by (i)

withholding from the Participant's salary or any other cash payment due to the Participant from the Company or a Related Corporation; (ii) withholding from the proceeds of the sale of shares of Common Stock acquired under the Plan, either through a voluntary sale or a mandatory sale arranged by the Company; or (iii) any other method deemed acceptable by the Board.

14. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

15. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment, if applicable, or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflicts of laws rules.

(e) If any particular provision of the Plan is found to be invalid or otherwise unenforceable, such provision will not affect the other provisions of the Plan, but the Plan will be construed in all respects as if such invalid provision were omitted.

(f) If any provision of the Plan does not comply with Applicable Law, such provision shall be construed in such a manner as to comply with Applicable Law.

16. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "***423 Component***" means the part of the Plan, which excludes the Non-423 Component, pursuant to which Purchase Rights that satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(b) "***Applicable Law***" means shall mean any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any

Governmental Body (or under the authority of the Nasdaq Stock Market or the Financial Industry Regulatory Authority).

(c) "***Board***" means the Board of Directors of the Company.

(d) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(e) "***Code***" means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(f) "***Committee***" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(g) "***Common Stock***" means the Company's Voting Common Stock.

(h) "***Company***" means Longboard Pharmaceuticals, Inc., a Delaware corporation.

(i) **"*Contributions***" means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(j) "***Corporate Transaction***" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its subsidiaries;

(ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(k) "***Director***" means a member of the Board.

(l) "***Eligible Employee***" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(m) "***Employee***" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(n) "***Employee Stock Purchase Plan***" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.

(o) "***Exchange Act***" means the U.S. Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(p) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with Applicable Laws and regulations and in a manner that complies with Sections 409A of the Code

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

(q) "***Governmental Body***" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the NASDAQ Stock Market and the Financial Industry Regulatory Authority).

(r) "***IPO Date***" means the date of the underwriting agreement between the Company and the underwriters managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(s) ***"Non-423 Component"*** means the part of the Plan, which excludes the 423 Component, pursuant to which Purchase Rights that are not intended to satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(t) "***Non-Voting Common***" means the Company's Non-Voting Common Stock.

(u) "***Offering***" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "***Offering Document***" approved by the Board for that Offering.

(v) "***Offering Date***" means a date selected by the Board for an Offering to commence.

(w) "***Officer***" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(x) "***Participant***" means an Eligible Employee who holds an outstanding Purchase Right.

(y) "***Plan***" means this Longboard Pharmaceuticals, Inc. 2021 Employee Stock Purchase Plan, as amended from time to time, including both the 423 Component and the Non-423 Component.

(z) "***Purchase Date***" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(aa) "***Purchase Period***" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(bb) "***Purchase Right***" means an option to purchase shares of Common Stock granted pursuant to the Plan.

(cc) "***Related Corporation***" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(dd) "***Securities Act***" means the U.S. Securities Act of 1933, as amended.

(ee) "***Tax-Related Items***" means any income tax, social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items arising out of or in relation to a Participant's participation in the Plan, including, but not limited to, the exercise of a Purchase Right and the receipt of shares of Common Stock or the sale or other disposition of shares of Common Stock acquired under the Plan.

(ff) "***Trading Day***" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

LONGBOARD PHARMACEUTICALS, INC.
PERFORMANCE BONUS PLAN

1. PURPOSE

The Longboard Pharmaceuticals, Inc. Performance Bonus Plan (the "***Plan***") is designed to provide incentives to participating employees to make important contributions to the success of Longboard Pharmaceuticals, Inc. (the "***Company***") and reward such employees for outstanding performance. The Plan is also intended to enhance the ability of the Company to attract and retain highly talented individuals.

2. ADMINISTRATION

The Plan will be administered by the Compensation Committee (the "***Plan Administrator***") of the Board of Directors (the "***Board***") of the Company. The Plan Administrator will have the sole discretion and authority to administer and interpret the Plan, and the decisions of the Plan Administrator will in every case be final and binding on all persons having an interest in the Plan.

3. ELIGIBILITY

(a) Participation

Each employee of the Company who (i) is an "officer" of the Company (within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and Rule 16a-1 thereunder) (such individuals, the "***Officers***") or is otherwise designated by the Plan Administrator as a participant in the Plan and (ii) has been provided with a Target Award (as defined in Section 4 below) by means of a written agreement with the Company or written notification by the Company, is eligible to participate in the Plan and shall be considered a "***Participant***" in the Plan. Unless otherwise specified by the Plan Administrator or expressly provided in a written agreement between a Participant and the Company, an individual who commences employment with the Company during an applicable performance period may become a Participant for such performance period, commencing on the date such individual commences employment with the Company (provided such individual meets all other eligibility criteria for participation in the Plan) and will receive a pro-rated Target Award (as defined below) for such initial performance period.

(b) Awards

Each Participant in a performance period will be granted an award of a contingent right to a future payment under the Plan (an "***Award***") for such performance period, which will be paid contingent upon achievement of applicable performance goals established by the Plan Administrator for the applicable performance period and earned upon satisfaction of all applicable conditions for earning such Awards.

(c) Award Payments

In order to be eligible to receive payment of an Award, a Participant must meet the following criteria unless otherwise specified by the Plan Administrator or expressly provided in a written

agreement between such Participant and the Company: (A) continue to be employed with the Company from the date his or her participation in the Plan commences for the applicable performance period through the date the Award is paid; and (B) comply with any rules of the Plan established by the Plan Administrator. If a Participant's position with the Company changes during a performance period (e.g., the Participant was an Officer in the beginning of the performance period and ceases to be an Officer during the performance period) but continues to be an employee through the date the Award is paid and otherwise is eligible to receive payment of an Award, such individual's Award may be adjusted as determined appropriate by the Plan Administrator. There is no guarantee for any payment of an Award under the Plan. Awards are paid as advances and not earned until no longer subject to recoupment in accordance with the Clawback Provisions described in Section 6(h) below, as applicable.

4. METHOD FOR ESTABLISHING AND DETERMINING AWARDS

(a) Establishment of Target Awards

For each performance period, each Participant shall have a target award opportunity under the Plan ("***Target Award***"), expressed in such Participant's offer letter or employment agreement with the Company or otherwise in writing and approved by the Plan Administrator, as either a percentage of such Participant's Base Salary earned during such performance period or as a set dollar amount. The Plan Administrator is not obligated to treat all Plan Participants similarly. For purposes of the Plan, unless otherwise determined by the Plan Administrator, "***Base Salary***" for a Participant means the total amount of base salary or base wages earned by such Participant during the applicable performance period while such individual is a Participant. Base Salary does not include any bonuses, commissions or other incentive compensation, amounts received or otherwise recognized in connection with equity awards, expense reimbursements, relocation payments, overtime or shift differential payments, contributions made by the Company under any employee benefit plan, the value of any employee benefits or perquisites paid for by the Company, or any other similar items of compensation. Base Salary will be determined before any deductions for taxes or benefits and deferrals of compensation pursuant to any Company-sponsored plan.

(b) Establishment of Performance Periods

The Plan Administrator will establish the applicable performance periods during which actual performance will be measured against the performance goals established by the Plan Administrator to determine the Participant's potential Award. Performance periods will generally be established by the Plan Administrator in reference to the Company's fiscal year and may consist of a single fiscal year, multiple fiscal years, or one or more portions of a fiscal year.

(c) Establishment of Performance Goals

With respect to each performance period, the Plan Administrator will establish the following for each Participant: (i) one or more performance goals (which may be corporate performance goals and/or individual performance goals) and (ii) the relative weights, if any, of such performance goals and (iii) such other terms and conditions of the Award, if any, the Plan Administrator determines appropriate in its discretion (and in accordance with the terms of the Plan). The Plan Administrator will make such determinations under this Section 5(c) at the times and in the manner

determined appropriate in its sole discretion and is not obligated to treat all Plan Participants similarly. Unless otherwise determined by the Plan Administrator, performance goals established for each Award shall be selected pursuant to the "Performance Goals" and "Performance Criteria" set forth in the Company's 2021 Equity Incentive Plan (or successor thereto).

(d) Evaluation of Performance Results

Following the end of each performance period, the Plan Administrator will determine whether (and to what extent) the performance goals established for such performance period have been achieved.

(e) Determination of Actual Awards

For each performance period, the Plan Administrator will determine the amount of any actual Award for each Participant (which may be below, at or above the applicable Target Award) based on (i) the extent to which the performance goals established for such performance period have been achieved (and any relative weighting of such performance goals), (ii) such Participant's Target Award, and (iii) if and the extent to which any and all other conditions for a Participant to earn and receive an Award have been met. Notwithstanding the foregoing, in determining the amount of any actual Award for any Participant, the Plan Administrator will have the discretion to reduce the amount of any actual Award below the amount calculated under the terms of the Plan, including to zero, or increase the amount of any actual Award above the amount calculated under the terms of the Plan. In making such determination the Plan Administrator may take into consideration such other factors as it determines appropriate, in its sole discretion, including the Participant's individual performance. Awards will additionally be subject to any maximum payout limitation approved by the Plan Administrator for the applicable performance period.

Unless otherwise determined by the Plan Administrator: (i) any Participant who switches from full-time to part-time employment during the performance period will have his or her actual Award reduced on a pro-rata basis based upon the applicable percentage of full-time equivalent employment that was in effect on an aggregate basis during the performance period and (ii) no adjustment will be made to the determined amount of an actual Award for any Participant due to any reduction in the percentage of full-time equivalent employment of a Participant that occurs after expiration of the performance period and prior to determination of the actual Award.

Unless prohibited by applicable law or otherwise determined by the Plan Administrator: (i) any Participant who is absent due to an approved leave of absence during the performance period, and who otherwise is eligible to receive and earns an actual Award for such performance period, will have his or her actual Award reduced on a pro-rata basis based upon the applicable period of active employment during the performance period and (ii) no adjustment will be made to the determined amount of an actual Award for any Participant due to any leave of absence that commences after expiration of the performance period and prior to determination of the actual Award.

5. PAYMENT OF AWARDS

Following, and subject to, the Plan Administrator's determination of actual Awards for a performance period, the Plan Administrator will approve the payment of Awards for such performance period, subject to satisfaction of any continued services or additional conditions established by the Plan Administrator to receive the Award. Payment of Awards under the Plan

will be made as soon as practicable after such approval or satisfaction of such conditions, as applicable. However, Awards are not earned until no longer subject to recovery pursuant to the Clawback Provisions described in Section 6(h) below, as applicable. As a result, to the extent the Clawback Provisions described in Section 6(h) below apply, the Company pays Awards in advance of the Participant's earning of the Award, and such advances are subject to recovery pursuant to the Clawback Provisions described in Section 6(h) below.

All Awards made under the Plan will be paid in the form of cash or, if approved by the Board or the Committee, an equity award under the Company's 2021 Equity Incentive Plan (or any successor thereto), as determined by the Plan Administrator in its sole discretion. The terms and conditions of any such equity award will be determined by the Plan Administrator in its sole discretion.

6. MISCELLANEOUS

(a) Withholding of Compensation. The Company will deduct and withhold from any amounts payable to Participants under the Plan any amounts required to be deducted and withheld by the Company under the provisions of any applicable federal, state, local or foreign statute, law, regulation, ordinance or order. The Company reserves the right to require a Participant to satisfy such deduction and withholding obligation in such manner as specified by the Company under applicable law, in the event that amounts payable to Participants under the Plan are not paid in the form of cash.

(b) Plan Funding. The Plan will be unfunded. Nothing contained in the Plan will be deemed to require the Company to deposit, invest or set aside amounts for the payment of any Awards under the Plan.

(c) Amendment or Termination of the Plan. The Plan may be amended or terminated at any time by the Compensation Committee or the Board.

(d) No Guarantee of Continued Service. The Plan will not confer any rights upon an employee to remain in employment or other service with the Company or any affiliate of the Company for any specific duration or interfere with or otherwise restrict in any way the rights of the Company or any affiliate of the Company to terminate an employee's employment or service with the Company (or affiliate, if applicable) for any reason, with or without cause or advance notice.

(e) No Assignment or Transfer. None of the rights, benefits, obligations or duties under the Plan may be assigned or transferred by any individual employee or Participant. Any purported assignment or transfer by any employee or Participant will be void. Participation in the Plan does not give any individual any ownership, security, or other rights in any assets of the Company.

(f) Validity. In the event any provision of the Plan is held invalid, void, or unenforceable, the same will not affect, in any respect whatsoever, the validity of any other provision of the Plan.

(g) Governing Documents. Each Award under the Plan shall be governed by the

provisions of the Plan as set forth herein. This Plan contains the entire agreement between the Company and each Participant on this subject, and supersedes all prior bonus compensation plans or programs of the Company and all other previous oral or written statements or written agreements regarding any such bonus compensation programs or plans.

(h) Clawback/Recovery. All Awards and payouts under the Plan will be subject to recoupment in accordance with the following provisions, as applicable (the "***Clawback Provisions***"): (i) any clawback policy that the Company (x) is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law and (y) otherwise voluntarily adopts, to the extent applicable and permissible under applicable law; and (ii) such other clawback, recovery or recoupment provisions set forth in an individual written agreement between the Company and the Participant. No recovery of compensation under such a Clawback Provision will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company.

(i) Recovery of Mistaken Payments: On occasion or by mistake, the Company may overpay or make incorrect payments of Awards. For these situations, to the extent permitted by applicable law, the Company reserves the right to offset or recover such mistaken payment amounts from any future payments of compensation to the Participant. By signing below, the Participant hereby authorizes the Company to reduce from any amounts owed to the Participant by the Company (including Base Salary, expense reimbursements, other bonuses or accrued vacation pay) such mistaken payment amounts and, to the extent the mistaken payment amounts are not repaid to the Company from such reduction, then the unpaid balance becomes a debt the Participant owes to the Company.

(j) Governing Law. The rights and obligations of any employee under the Plan will be governed by and interpreted, construed and enforced in accordance with the laws of the state in which the Participant primarily performs services to the Company, without regard to its or any other jurisdiction's conflicts of laws principles.

(k) Section 409A. All Plan payments are intended to satisfy the requirements for the "short-term deferral" exemption from application of Section 409A provided under Treasury Regulations Sections 1.409A-1(b)(4) and any ambiguities herein shall be interpreted accordingly.

[End of Plan]

LONGBOARD PHARMACEUTICALS, INC.
NON-EMPLOYEE DIRECTOR COMPENSATION POLICY
ADOPTED: FEBRUARY 28, 2021

Each member of the Board of Directors (the "***Board***") of Longboard Pharmaceuticals, Inc. (the "***Company***") who is not also serving as an employee of to the Company or any of its subsidiaries and who is designated by the Board or the Compensation Committee of the Board as eligible to receive compensation for his or her services as a member of the Board (each such member, an "***Eligible Director***") will be eligible to receive the compensation described in this Non-Employee Director Compensation Policy (the "***Director Compensation Policy***").

This Director Compensation Policy will become effective upon the execution of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Company's common stock (the "***Common Stock***"), pursuant to which the Common Stock is priced for the initial public offering (the initial public offering price being referred to as the "***IPO Price***," and the date of such execution being referred to as the "***IPO Date***"). As of the IPO Date, the Director Compensation Policy will supersede all agreements or arrangements currently in place with Eligible Directors related to cash and equity compensation. The Director Compensation Policy may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

An Eligible Director may decline all or any portion of his or her compensation by giving notice to the Company prior to the date cash is earned or equity awards are granted, as the case may be.

Annual Cash Compensation

Commencing at the end of the calendar quarter in which the IPO Date occurs, each Eligible Director will receive the cash compensation set forth below for service on the Board. The annual cash compensation amounts will be payable in equal quarterly installments, in arrears following the end of each quarter in which the service occurred, pro-rated for any partial months of service. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:
    a. All Eligible Directors: $40,000
    b. Additional Chair of the Board Service Retainer: $30,000
2. Annual Committee Member Service Retainer:
    a. Member of the Audit Committee: $10,000
    b. Member of the Compensation Committee: $7,500
    c. Member of the Nominating and Corporate Governance Committee: $5,000
3. Annual Committee Chair Service Retainer (in addition to Committee Member Service Retainer):
    a. Chairman of the Audit Committee: $10,000
    b. Chairman of the Compensation Committee: $7,500
    c. Chairman of the Nominating and Corporate Governance Committee: $5,000

Equity Compensation

Equity awards will be granted under the Company's 2021 Equity Incentive Plan, as it may be amended from time to time and including any successor plan thereto (the "***Plan***"). All stock options granted under this Director Compensation Policy will be Nonstatutory Stock Options (as defined in the Plan) that contain the following terms (i) an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of the underlying Common Stock on the date of grant, (ii) a term of ten years from the date of grant (subject to earlier termination as provided in the Plan), (iii) vesting acceleration in full upon a Change in Control (as defined in the Plan) or upon the Eligible Director's death or Disability (as defined in the Plan), (iv) a post-termination exercise period for vested options upon the Eligible Director's termination of Continuous Service other than for Cause (as such terms are defined in the Plan) of three years from the date of termination (subject to earlier termination as provided in the Plan or as a result of the ten year maximum term of the option).

(a) Automatic Equity Grants.

(i) ***New Directors.*** Without any further action of the Board, each Eligible Director who, after the IPO Date, is elected or appointed for the first time to join the Board will automatically, upon the date of his or her initial election or appointment to the Board (or, if such date is not a market trading day, the first market trading day thereafter) (the "***Start Date***"), be granted a Nonstatutory Stock Option to purchase 12,367 shares common stock of the Company (the "***Initial Option Grant***") which will vest in a series of 36 equal monthly installments over the three-year period measured from the Start Date, subject to the Eligible Director's Continuous Service (as defined in the Plan) through each such date. Eligible Directors whose initial election or appointment to the Board occurred within the 30 day period prior to the IPO Date shall receive an Initial Option Grant on the IPO Date, without further action by the Board, and the exercise price per share for such option grants shall be the IPO Price.

In addition to the Initial Option Grant, if such Eligible Director's Start Date occurs on the date of the Company's annual meeting of stockholders, such Eligible Director will automatically, upon the date of such annual meeting of stockholders, be granted the Annual Option Grant described in (a)(ii) below. If such Eligible Director's Start Date occurs on a date other than the date of the Company's the annual meeting of stockholders, such Eligible Director will automatically, upon the Start Date, be granted the Annual Option Grant described in (a)(ii) below, prorated based on the number of full calendar months between the Start Date and the Company's next annual meeting of stockholders (the "***Prorated Annual Grant***"). Each Prorated Annual Grant will vest in equal monthly installments from the Start Date through the date of the Company's next annual meeting of stockholders. For purposes of calculating the Prorated Annual Grant and its vesting schedule, the Company's annual meeting of stockholders shall be assumed to occur in May of each year (beginning with and including May 2022), irrespective of when the Company's annual meeting of stockholders actually occurs. For example, if an Eligible Director was initially appointed or elected to the Board on October 15, 2022, then such Eligible Director would receive a Prorated Annual Grant on October 15, 2022 to purchase 6,184 shares of common stock (50% of the Annual Option Grant) that vests in six equal monthly installments from November 15, 2022 through April 15, 2023. For clarity, for any Eligible Directors whose Start Date occurs in 2021 prior to May 2021, the Prorated Annual Grant will be larger than the Annual Option Grant as a result of the Company not expecting to hold an annual meeting of stockholders in 2021.

Eligible Directors whose Start Date occurred within the 30 day period prior to the IPO Date shall receive a Prorated Option Grant on the IPO Date, without further action by the Board, and the exercise price per share for such option grants shall be the IPO Price.

(ii) ***Continuing Directors.*** Without any further action of the Board, at the close of business on the date of each annual meeting of Company stockholders following the IPO Date (the "***Grant Date***"), each person who is then an Eligible Director will, unless the Board or the Compensation Committee of the Board determines otherwise prior to such time, automatically be granted a Nonstatutory Stock Option to purchase 12,367 shares of common stock (the "***Annual Option Grant***"). Each Annual Option Grant will vest in a series of 12 equal monthly installments following the date of grant, provided that, in any event the Annual Option Grant will become fully vested on the day before the Company's next annual meeting of stockholders following the Grant Date, subject to the Eligible Director's Continuous Service (as defined in the Plan) through each such date.

(c) Non-Employee Director Compensation Limit. Notwithstanding the foregoing, the aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director (as defined in the Plan) shall in no event exceed the limits set forth in Section 3(d) of the Plan.

(d) Remaining Terms. The remaining terms and conditions of each award, including transferability, will be as set forth in the Plan and the Company's Standard Option Grant Package applicable to Non-Employee Directors, in the forms adopted from time to time by the Board or Compensation Committee of the Board.

Expenses

The Company will reimburse Eligible Director for ordinary, necessary and reasonable out-of-pocket travel expenses to cover in-person attendance at and participation in Board and committee meetings; *provided*, that the Eligible Director timely submit to the Company appropriate documentation substantiating such expenses in accordance with the Company's travel and expense policy, as in effect from time to time.

Longboard Pharmaceuticals, Inc.

March 1, 2021

Kevin Lind
via email

Re: Offer of Employment

Dear Kevin:

You are currently employed by Longboard Pharmaceuticals, Inc. (the "**Company**") under the terms of an offer letter between you and the Company dated October 27, 2020 (the "**Offer Letter**"). The Company is amending and restating the terms of the Offer Letter to reflect your continued employment terms as set forth in this employment agreement (the "**Agreement**"). Provided you accept this Agreement by signing and returning it to the Company, this Agreement will become effective as of the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Company's common stock, pursuant to which such common stock is priced for the initial public offering (the "**IPO Date**") and upon such IPO Date, shall supersede and replace your Offer Letter in its entirety, and this Agreement shall then govern the terms of your employment with the Company.

1. Employment by the Company. Your employment with the Company shall continue in the position of Chief Executive Officer ("**CEO**"). This is an exempt position, and during your employment with the Company, you will devote your best efforts and substantially all of your business time and attention to the business of the Company, except for approved vacation periods and reasonable periods of illness or other incapacities permitted by the Company's general employment policies. You shall perform such duties as are required by the Company's Board of Directors ("**Board**"), to whom you will report. Your primary work location shall be the Company's office located in San Diego, California. The Company reserves the right to reasonably require you to perform your duties at places other than your primary office location from time to time, and to require reasonable business travel. The Company may modify your job title and duties as it deems necessary and appropriate in light of the Company's needs and interests from time to time.

2. Compensation.

2.1 Base Salary. For services to be rendered hereunder, you shall receive a base salary at the rate of $550,000 per year (the "**Base Salary**"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule.

2.2 Annual Bonus. You will be eligible for an annual discretionary bonus with a target amount of 60% of your then current annual Base Salary, prorated for the number of days employed in a calendar year (the **"Annual Bonus"**). Whether you receive an Annual Bonus for any given year, and the amount of any such Annual Bonus, will be determined by the Board (and/or its Compensation Committee) in its discretion based upon the achievement of corporate and/or individual objectives and milestones that are determined in the sole discretion of the Board (and/or its Compensation Committee). You must continue to be employed through the date the Annual Bonus is paid in order to earn such bonus. The Annual Bonus, if earned, shall be paid to you in a lump sum no later than March 15th of the calendar year that follows the performance year, subject to applicable payroll deductions and withholdings.

2.3 Equity. You were previously granted certain equity awards covering the Company's common stock under the Company's 2020 Equity Incentive Plan. Your equity awards will continue to be governed by the terms of the 2020 Equity Incentive Plan and the grant documents thereunder. You will remain eligible to receive future equity awards at the discretion of the Board or the Compensation Committee.

3. Reasonable Business Expenses. You will be eligible for reimbursement of all reasonable, necessary and documented out-of-pocket business, entertainment, and travel expenses incurred by you in connection with the performance of your duties hereunder in accordance with the Company's expense reimbursement policies and procedures.

4. Company Policies; Standard Company Benefits. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control. You shall be entitled to participate in all employee benefit programs for which you are eligible under the terms and conditions of the benefit plans that may be in effect from time to time and provided by the Company to its employees. The Company reserves the right to cancel or change the benefit plans or programs it offers to its employees at any time.

5. At-Will Employment. Your employment relationship is at-will. Either you or the Company may terminate the employment relationship at any time, with or without cause or advance notice. Upon termination of your employment for any reason, you shall resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the date of termination.

6. Outside Activities During Employment. Except with the prior written consent of the Board, you will not during the term of your employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which you are a passive investor. You may engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of your duties hereunder. You agree not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise.

7. Termination; Severance.

7.1 Term and Termination. The term of this Agreement (the "**Term**") shall be the period commencing on the IPO Date and ending on the date that this Agreement is terminated by either party pursuant to the provisions of this Agreement. You are employed at-will, meaning that, subject to the terms and conditions set forth herein, either the Company or you may terminate your employment at any time, with or without Cause.

7.2 Compensation upon Termination. Upon the termination of your employment for any reason, the Company shall pay you all of your accrued and unpaid wages earned through your last day of employment (the "**Separation Date**").

7.3 Involuntary Termination Unrelated to a Change in Control. If you are subject to an Involuntary Termination (that does not occur within the Change in Control Period (as defined below)), and provided that you remain in compliance with the terms of this Agreement (including the

conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "**Severance Benefits**"):

(a) Cash Severance. The Company shall pay you, as severance,

(i) the equivalent of ***eighteen (18) months*** of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings (the "**Severance**"). The Severance will be paid as a continuation on the Company's regular payroll, beginning no later than the first regularly-scheduled payroll date following the sixtieth (60th) day after your Separation from Service, provided the Separation Agreement (as discussed in Section 7.7) has become effective; and

(ii) a pro-rata portion of your Annual Bonus for the calendar year in which the Involuntary Termination occurs, based on actual performance results for such year as determined by the Board or the Compensation Committee (determined by multiplying the amount of your Annual Bonus which would be due for the full calendar year by a fraction, (i) the numerator of which is the number of days during the calendar year that you were employed by the Company and (ii) the denominator of which is three hundred sixty-five (365)), if any (the "**Pro-Rata Bonus**"), payable at the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, but in no event prior to the effective date of the Separation Agreement and no later than March 15 of the year following the year in which your Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. If you are eligible for and timely elect continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 or any state law of similar effect ("**COBRA**") following your Involuntary Termination, the Company will pay your COBRA group health insurance premiums for you and your eligible dependents directly to the insurer until the earliest of (A) the end of the period immediately following your Involuntary Termination that is equal to twelve (12) months (the "**COBRA Payment Period**"), (B) the expiration of your eligibility for continuation coverage under COBRA, or (C) the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. For purposes of this Section, references to COBRA premiums shall not include any amounts payable by you under a Section 125 health care reimbursement plan under the Code. Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that it cannot pay the COBRA premiums without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then regardless of whether you elect continued health coverage under COBRA, and in lieu of providing the COBRA premiums, the Company will instead pay you on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings (such amount, the "**Special Severance Payment**"), which payments shall continue until the earlier of expiration of the COBRA Payment Period or the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. On the first payroll date following the effectiveness of the Separation Agreement, the Company will make the first payment to the insurer under this clause (and, in the case of the Special Severance Payment, such payment will be to you, in a lump sum) equal to the aggregate amount of payments that the Company would have paid through such date had such payments instead commenced on the Separation Date, with the balance of the payments paid thereafter on the schedule described above. If you become eligible for coverage under another employer's group health plan, you must immediately notify the Company of such event, and all payments and obligations under this subsection shall cease.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding options, restricted stock unit awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to the Involuntary Termination, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional twelve (12) months of service with the Company as of the Separation Date. For the avoidance of doubt, equity awards which vest wholly or partially subject to the attainment of performance goals are not eligible to accelerate vesting pursuant to this subsection.

7.4 Involuntary Termination in Connection with a Change in Control. If you are subject to an Involuntary Termination during the Change in Control Period, and provided that you remain in compliance with the terms of this Agreement (including the conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "***CIC Severance Benefits***")

(a) Cash Severance. The Company shall pay you, as severance,

(i) an amount equal to 150% of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings, *plus* 150% of your target Annual Bonus amount for the year in which the Involuntary Termination occurs, in a lump sum on the first regularly scheduled payroll date following the Release Deadline, but in no event later than March 15 of the year following the year in which your Separation from Service occurs; and

(ii) Pro-Rata Bonus, payable upon the later of (x) the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, (y) the first payroll date following the effective date of the Separation Agreement, but in either case, no later than March 15 of the year following the year in which Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. You will receive the payment for continued group health plan benefits described in Section 7.3(b) above, except that the COBRA Payment Period will be equal to eighteen (18) months rather than twelve (12) months.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering the Company's common stock and restricted stock units that are held by you as of immediately prior to the Separation Date shall accelerate vesting in full effective as of the later of the Separation Date or the effective date of the Change in Control (the "**CIC Acceleration Benefit**"). For the avoidance of doubt, the CIC Acceleration Benefit is conditioned upon the actual consummation of a Change in Control.

7.5 Termination due to Death or Disability. If your employment with the Company terminates due to your death or Disability, then (a) the vesting and exercisability of all outstanding options, restricted stock awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to your death or Disability, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional twenty-four (24) months of service with the Company as of the Separation Date, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits or CIC Acceleration Benefit.

7.6 Termination for Cause; Resignation Without Good Reason. If you resign without Good Reason, the Company terminates your employment for Cause, or upon dissolution or cessation of the Company, then (a) you will no longer vest in any equity awards, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits.

7.7 Conditions to Receipt of Severance Benefits. The receipt of the Severance Benefits or CIC Severance Benefits will be subject to you signing and not revoking a separation agreement and general release of claims in a form reasonably satisfactory to the Company (the "**Separation Agreement**") within the time period set forth therein, and allowing such Separation Agreement to become effective pursuant to its terms by no later than the sixtieth (60th) day after the Separation Date ("**Release Deadline**"). No Severance Benefits or CIC Severance Benefits will be paid or provided until the Separation Agreement becomes effective. You shall also resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the Separation Date.

8. Definitions.

8.1 Cause. For purposes of this Agreement, **"Cause"** for termination means: (a) conviction of, or plea of guilty or nolo contendere to, a felony or any crime involving fraud, dishonesty or moral turpitude; (b) participation in any fraud against the Company; (c) material and intentional damage to any property of the Company; (d) willful misconduct, or any violation of Company policy that causes material harm to the Company; (e) breach of this Agreement, the Confidentiality Agreement (as defined below), or any other written agreement with the Company; or (f) conduct by you which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve. For a termination of employment to be for Cause, you must (a) receive a written notice from the Board which indicates in reasonable detail the facts and circumstances claimed to provide a basis for the termination of your employment for Cause; and (b) be provided with an opportunity to cure or resolve, no later than 30 days following the receipt of such notice, the behavior in question (if deemed curable by the Board in its sole discretion).

8.2 Change in Control. For purposes of this Agreement, a "**Change in Control**" shall have the meaning as set forth in the Plan.

8.3 Change in Control Period. For purposes of this Agreement, the "**Change in Control Period**" means the period commencing three (3) months prior to a Change in Control and ending eighteen (18) months following a Change in Control.

8.4 Code. For purposes of this Agreement, **"Code"** means the U.S. Internal Revenue Code of 1986 (as it has been and may be amended from time to time) and any regulations and guidance that has been promulgated or may be promulgated from time to time thereunder and any state law of similar effect.

8.5 Disability. For purposes of this Agreement, "**Disability**" means your inability to perform satisfactorily all of your usual services for the Company because you have become permanently disabled within the meaning of any policy of disability income insurance covering employees of the Company then in force. In the event the Company has no policy of disability income insurance covering employees of the Company in force when you become disabled, then such term shall mean your permanent and total disability within the meaning of Section 22(e)(3) of the Code.

8.6 Good Reason. For purposes of this Agreement, you shall have "**Good Reason**" for resignation from employment with the Company if any of the following actions are taken by the Company without your prior written consent: (a) a material reduction in your Base Salary, which the parties agree is a reduction of at least 10% of your Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated employees); (b) a material reduction in your duties (including responsibilities and/or authorities) other than the transition of duties, responsibilities and authorities to others within the Company as the Company's management team evolves (excluding oversight and management of your primary function); or (c) relocation of your principal place of employment to a place that increases your one-way commute by more than fifty (50) miles as compared to your then-current principal place of employment immediately prior to such relocation; provided that any relocation back to the Company office from remote work will not be considered a relocation of your principal place of employment with the Company for purposes of this definition. In order to resign for Good Reason, you must provide written notice to the Company's Board within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, allow the Company at least 30 days from receipt of such written notice to cure such event, and if such event is not reasonably cured within such period, you must resign from all positions you then hold with the Company not later than 90 days after the expiration of the cure period.

8.7 Involuntary Termination. For purposes of this Agreement, "**Involuntary Termination**" means a termination of your employment with the Company pursuant to either (i) a termination initiated by the Company without Cause, or (ii) your resignation for Good Reason, and provided in either case such termination constitutes a Separation from Service. An Involuntary Termination does not include any other termination of your employment, including a termination due to your death or Disability.

8.8 Plan. For purposes of this Agreement, "**Plan**" means the Company's 2021 Equity Incentive Plan (as it may be amended from time to time).

8.9 Separation from Service. For purposes of this Agreement, "Separation from Service" means a "separation from service", as defined under Treasury Regulation Section 1.409A-1(h).

9. Proprietary Information Obligations. As a condition of employment, you shall execute and abide by the Company's standard form of Proprietary Information and Inventions Agreement (the "**Confidentiality Agreement**"), attached as **Exhibit A**. In your work for the Company, you will be expected not to use or disclose any confidential information, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company. You agree that you will not bring onto Company premises any unpublished documents or property belonging to any former employer or other person to whom you have an obligation of confidentiality. You hereby represent that you have disclosed to the Company any contract you have signed that may restrict your activities on behalf of the Company.

10. Section 409A. It is intended that all of the severance benefits and other payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Code Section 409A provided under Treasury Regulations Sections 1.409A 1(b)(4), 1.409A 1(b)(5) and 1.409A 1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions, and to the extent not so exempt, this Agreement (and any definitions hereunder) will be

construed in a manner that complies with Section 409A. For all purposes of Code Section 409A (including, without limitation, for purposes of Treasury Regulations Sections 1.409A 2(b)(2)(i) and (iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Code Section 409A(a)(2)(B)(i), and if any of the payments upon Separation from Service set forth herein and/or under any other agreement with the Company are deemed to be "deferred compensation," then to the extent delayed commencement of any portion of such payments is required in order to avoid a prohibited distribution under Code Section 409A(a)(2)(B)(i) and the related adverse taxation under Section 409A, such payments shall not be provided to you prior to the earliest of (i) the first date following expiration of the six-month period following the date of your Separation from Service with the Company, (ii) the date of your death or (iii) such earlier date as permitted under Section 409A without the imposition of adverse taxation. Upon the first business day following the expiration of such applicable Code Section 409A(a)(2)(B)(i) period, all payments deferred pursuant to this Paragraph shall be paid in a lump sum to you, and any remaining payments due shall be paid as otherwise provided herein or in the applicable agreement. No interest shall be due on any amounts so deferred. If the severance benefits are not covered by one or more exemptions from the application of Section 409A and the Release Deadline occurs in the calendar year following the calendar year of your Separation from Service, the Separation Agreement will not be deemed effective any earlier than the Release Deadline for purposes of determining the timing of provision of any severance benefits.

11. Section 280G.

If any payment or benefit you will or may receive from the Company or otherwise (a "**280G Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then any such 280G Payment pursuant to this Agreement or otherwise (a "**Payment**") shall be equal to the Reduced Amount. The "**Reduced Amount**" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "**Reduction Method**") that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "**Pro Rata Reduction Method**").

Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be

reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

Unless you and the Company agree on an alternative accounting firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change in Control transaction triggering the Payment shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other reasonable time as requested by you or the Company.

If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section so that no portion of the remaining Payment is subject to the Excise Tax). For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) in the first paragraph of this Section, you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

12. Arbitration of All Disputes.

12.1 Agreement to Arbitrate. To ensure the timely and economical resolution of disputes that may arise between you and the Company, both you and the Company mutually agree that pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by applicable law, you and the Company will submit solely to final, binding and confidential arbitration any and all disputes, claims, or causes of action arising from or relating to: **(i)** the negotiation, execution, interpretation, performance, breach or enforcement of this Agreement; or **(ii)** your employment with the Company (including but not limited to all statutory claims); or **(iii)** the termination of your employment with the Company (including but not limited to all statutory claims). **BY AGREEING TO THIS ARBITRATION PROCEDURE, BOTH YOU AND THE COMPANY WAIVE THE RIGHT TO RESOLVE ANY SUCH DISPUTES THROUGH A TRIAL BY JURY OR JUDGE OR THROUGH AN ADMINISTRATIVE PROCEEDING.**

12.2 Arbitrator Authority. The arbitrator shall have the sole and exclusive authority to determine whether a dispute, claim or cause of action is subject to arbitration under this Section and to determine any procedural questions which grow out of such disputes, claims or causes of action and bear on their final disposition.

12.3 Individual Capacity Only. All claims, disputes, or causes of action under this Section, whether by you or the Company, must be brought solely in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of

representative or class proceeding. To the extent that the preceding sentences in this Section are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration.

12.4 Arbitration Process. Any arbitration proceeding under this Section shall be presided over by a single arbitrator and conducted by Judicial Arbitration and Mediation Services, Inc. ("**JAMS**") in San Diego, California, or as otherwise agreed to by you and the Company, under the then applicable JAMS rules for the resolution of employment disputes (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party's own expense. The arbitrator shall: **(i)** have the authority to compel adequate discovery for the resolution of the dispute; **(ii)** issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award; and **(iii)** be authorized to award any or all remedies that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the amount of court fees that would be required of you if the dispute were decided in a court of law.

12.5 Excluded Claims. This Section shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, the California Fair Employment and Housing Act, as amended, and the California Labor Code, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration and such applicable law is not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the "**Excluded Claims**"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be filed with a court, while any other claims will remain subject to mandatory arbitration.

12.6 Injunctive Relief and Final Orders. Nothing in this Section is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any final award in any arbitration proceeding hereunder may be entered as a judgment in the federal and state courts of any competent jurisdiction and enforced accordingly.

13. General Provisions. This Agreement, together with the Confidentiality Agreement, constitutes the entire agreement between you and the Company with regard to this subject matter and is the complete, final, and exclusive embodiment of the parties' agreement with regard to this subject matter. This Agreement is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. Modifications or amendments to this Agreement, other than those changes expressly reserved to the Company's discretion in this letter, must be made in a written agreement signed by you and the Company's Board. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement. This Agreement is intended to bind and inure to the benefit of and be enforceable by you and the Company, and their

respective successors, assigns, heirs, executors and administrators. The Company may freely assign this Agreement, without your prior written consent. You may not assign any of your duties hereunder and you may not assign any of your rights hereunder without the written consent of the Company. This Agreement shall become effective as of the IPO Date and shall terminate upon your termination of employment with the Company. The obligations as forth under Sections 7, 8, 9, 10, 11, 12, and 13 will survive the termination of this Agreement. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

If you have any questions about this Agreement, please do not hesitate to call me.

Best regards,

LONGBOARD PHARMACEUTICALS, INC.

/s/ Paul Sekhri

Paul Sekhri
Director

Accepted and agreed:

/s/ Kevin Lind

Kevin Lind

Date: 3/1/2021

Exhibit A

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

11.

Longboard Pharmaceuticals, Inc.

March 1, 2021

Philip Perera, M.D.
via email

Re: Offer of Employment

Dear Philip:

You are currently employed by Longboard Pharmaceuticals, Inc. (the "**Company**") under the terms of an offer letter between you and the Company dated November 6, 2020 (the "**Offer Letter**"). The Company is amending and restating the terms of the Offer Letter to reflect your continued employment terms as set forth in this employment agreement (the "**Agreement**"). Provided you accept this Agreement by signing and returning it to the Company, this Agreement will become effective as of the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Company's common stock, pursuant to which such common stock is priced for the initial public offering (the "**IPO Date**") and upon such IPO Date, shall supersede and replace your Offer Letter in its entirety, and this Agreement shall then govern the terms of your employment with the Company.

1. Employment by the Company. Your employment with the Company shall continue in the position of Chief Medical Officer ("**CMO**"). This is an exempt position, and during your employment with the Company, you will devote your best efforts and substantially all of your business time and attention to the business of the Company, except for approved vacation periods and reasonable periods of illness or other incapacities permitted by the Company's general employment policies. You shall perform such duties as are required by the Company's Chief Executive Officer ("**CEO**"), to whom you will report. Your primary work location shall be the Company's office located in San Diego, California. The Company reserves the right to reasonably require you to perform your duties at places other than your primary office location from time to time, and to require reasonable business travel. The Company may modify your job title and duties as it deems necessary and appropriate in light of the Company's needs and interests from time to time.

2. Compensation.

2.1 Base Salary. For services to be rendered hereunder, you shall receive a base salary at the rate of $425,000 per year (the "**Base Salary**"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule.

2.2 Annual Bonus. You will be eligible for an annual discretionary bonus with a target amount of 40% of your then current annual Base Salary, prorated for the number of days employed in the applicable calendar year (the **"Annual Bonus"**). Whether you receive an Annual Bonus for any given year, and the amount of any such Annual Bonus, will be determined by the Company's Board of Directors (the "**Board**") (and/or its Compensation Committee) in its discretion based upon the achievement of corporate and/or individual objectives and milestones that are determined in the sole discretion of the Board (and/or its Compensation Committee). You must continue to be employed through the date the Annual Bonus is paid in order to earn such bonus. The Annual Bonus, if earned, shall be paid

to you in a lump sum no later than March 15th of the calendar year that follows the performance year, subject to applicable payroll deductions and withholdings.

2.3 Equity. You were previously granted certain equity awards covering the Company's common stock under the Company's 2020 Equity Incentive Plan. Your equity awards will continue to be governed by the terms of the 2020 Equity Incentive Plan and the grant documents thereunder. You will remain eligible to receive future equity awards at the discretion of the Board or the Compensation Committee.

3. Reasonable Business Expenses. You will be eligible for reimbursement of all reasonable, necessary and documented out-of-pocket business, entertainment, and travel expenses incurred by you in connection with the performance of your duties hereunder in accordance with the Company's expense reimbursement policies and procedures.

4. Company Policies; Standard Company Benefits. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control. You shall be entitled to participate in all employee benefit programs for which you are eligible under the terms and conditions of the benefit plans that may be in effect from time to time and provided by the Company to its employees. The Company reserves the right to cancel or change the benefit plans or programs it offers to its employees at any time.

5. At-Will Employment. Your employment relationship is at-will. Either you or the Company may terminate the employment relationship at any time, with or without cause or advance notice. Upon termination of your employment for any reason, you shall resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the date of termination.

6. Outside Activities During Employment. Except with the prior written consent of the Company, you will not during the term of your employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which you are a passive investor. You may engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of your duties hereunder. You agree not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise. Ownership by you in professionally managed funds over which you do not have control or discretion in investment decisions, or, an investment of less than one percent (1%) of the outstanding shares of capital stock of any corporation with one or more classes of its capital stock listed on a national securities exchange or publicly traded on a national securities exchange or in the over-the-counter market shall not constitute a breach of this Section.

7. Termination; Severance.

7.1 Term and Termination. The term of this Agreement (the "**Term**") shall be the period commencing on the IPO Date and ending on the date that this Agreement is terminated by either party pursuant to the provisions of this Agreement. You are employed at-will, meaning that, subject to the terms and conditions set forth herein, either the Company or you may terminate your employment at any time, with or without Cause.

7.2 Compensation upon Termination. Upon the termination of your employment for any reason, the Company shall pay you all of your accrued and unpaid wages earned through your last day of employment (the "**Separation Date**").

7.3 Involuntary Termination Unrelated to a Change in Control. If you are subject to an Involuntary Termination (that does not occur within the Change in Control Period (as defined below)), and provided that you remain in compliance with the terms of this Agreement (including the conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "**Severance Benefits**"):

(a) Cash Severance. The Company shall pay you, as severance,

(i) the equivalent of ***twelve (12) months*** (the "**Severance Period**") of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings (the "**Severance**"). The Severance will be paid as a continuation on the Company's regular payroll, beginning no later than the first regularly-scheduled payroll date following the sixtieth (60^{th}) day after your Separation from Service, provided the Separation Agreement (as discussed in Section 7.7) has become effective; and

(ii) a pro-rata portion of your Annual Bonus for the calendar year in which the Involuntary Termination occurs, based on actual performance results for such year as determined by the Board or the Compensation Committee (determined by multiplying the amount of your Annual Bonus which would be due for the full calendar year by a fraction, (i) the numerator of which is the number of days during the calendar year that you were employed by the Company and (ii) the denominator of which is three hundred sixty-five (365)), if any (the "**Pro-Rata Bonus**"), payable at the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, but in no event prior to the effective date of the Separation Agreement and no later than March 15 of the year following the year in which your Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. If you are eligible for and timely elect continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 or any state law of similar effect ("**COBRA**") following your Involuntary Termination, the Company will pay your COBRA group health insurance premiums for you and your eligible dependents directly to the insurer until the earliest of (A) the end of the period immediately following your Involuntary Termination that is equal to the Severance Period (the "**COBRA Payment Period**"), (B) the expiration of your eligibility for continuation coverage under COBRA, or (C) the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. For purposes of this Section, references to COBRA premiums shall not include any amounts payable by you under a Section 125 health care reimbursement plan under the Code. Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that it cannot pay the COBRA premiums without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then regardless of whether you elect continued health coverage under COBRA, and in lieu of providing the COBRA premiums, the Company will instead pay you on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings (such amount, the "**Special Severance Payment**"), which payments shall continue until the earlier of expiration of the COBRA Payment Period or the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. On the first payroll date following the effectiveness of the Separation Agreement, the Company will make the first payment to the insurer under this clause (and, in the case of

the Special Severance Payment, such payment will be to you, in a lump sum) equal to the aggregate amount of payments that the Company would have paid through such date had such payments instead commenced on the Separation Date, with the balance of the payments paid thereafter on the schedule described above. If you become eligible for coverage under another employer's group health plan, you must immediately notify the Company of such event, and all payments and obligations under this subsection shall cease.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding options, restricted stock unit awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to the Involuntary Termination, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional six (6) months of service with the Company as of the Separation Date. For the avoidance of doubt, equity awards which vest wholly or partially subject to the attainment of performance goals are not eligible to accelerate vesting pursuant to this subsection.

7.4 Involuntary Termination in Connection with a Change in Control. If you are subject to an Involuntary Termination during the Change in Control Period, and provided that you remain in compliance with the terms of this Agreement (including the conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "***CIC Severance Benefits***")

(a) Cash Severance. The Company shall pay you, as severance,

(i) an amount equal to 100% of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings, *plus* 100% of your target Annual Bonus amount for the year in which the Involuntary Termination occurs, in a lump sum on the first regularly scheduled payroll date following the Release Deadline, but in no event later than March 15 of the year following the year in which your Separation from Service occurs; and

(ii) Pro-Rata Bonus, payable upon the later of (x) the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, (y) the first payroll date following the effective date of the Separation Agreement, but in either case, no later than March 15 of the year following the year in which Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. You will receive the payment for continued group health plan benefits described in Section 7.3(b) above.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering the Company's common stock and restricted stock units that are held by you as of immediately prior to the Separation Date shall accelerate vesting in full effective as of the later of the Separation Date or the effective date of the Change in Control (the "**CIC Acceleration Benefit**"). For the avoidance of doubt, the CIC Acceleration Benefit is conditioned upon the actual consummation of a Change in Control.

7.5 Termination due to Death or Disability. If your employment with the Company terminates due to your death or Disability, then (a) the vesting and exercisability of all outstanding options, restricted stock awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to your death or Disability, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional

twenty-four (24) months of service with the Company as of the Separation Date, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits or CIC Acceleration Benefit.

7.6 Termination for Cause; Resignation Without Good Reason. If you resign without Good Reason, the Company terminates your employment for Cause, or upon dissolution or cessation of the Company, then (a) you will no longer vest in any equity awards, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits.

7.7 Conditions to Receipt of Severance Benefits. The receipt of the Severance Benefits or CIC Severance Benefits will be subject to you signing and not revoking a separation agreement and general release of claims in a form reasonably satisfactory to the Company (the "**Separation Agreement**") within the time period set forth therein, and allowing such Separation Agreement to become effective pursuant to its terms by no later than the sixtieth (60th) day after the Separation Date ("**Release Deadline**"). No Severance Benefits or CIC Severance Benefits will be paid or provided until the Separation Agreement becomes effective. You shall also resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the Separation Date.

8. Definitions.

8.1 Cause. For purposes of this Agreement, **"Cause"** for termination means: (a) conviction of, or plea of guilty or nolo contendere to, a felony or any crime involving fraud, dishonesty or moral turpitude; (b) participation in any fraud against the Company; (c) material and intentional damage to any property of the Company; (d) willful misconduct, or any violation of Company policy that causes material harm to the Company; (e) breach of this Agreement, the Confidentiality Agreement (as defined below), or any other written agreement with the Company; or (f) conduct by you which in the good faith and reasonable determination of the Company demonstrates gross unfitness to serve. For a termination of employment to be for Cause, you must (a) receive a written notice from the Company which indicates in reasonable detail the facts and circumstances claimed to provide a basis for the termination of your employment for Cause; and (b) be provided with an opportunity to cure or resolve, no later than 30 days following the receipt of such notice, the behavior in question (if deemed curable by the Company in its sole discretion).

8.2 Change in Control. For purposes of this Agreement, a "**Change in Control**" shall have the meaning as set forth in the Plan.

8.3 Change in Control Period. For purposes of this Agreement, the "**Change in Control Period**" means the period commencing three (3) months prior to a Change in Control and ending eighteen (18) months following a Change in Control.

8.4 Code. For purposes of this Agreement, **"Code"** means the U.S. Internal Revenue Code of 1986 (as it has been and may be amended from time to time) and any regulations and guidance that has been promulgated or may be promulgated from time to time thereunder and any state law of similar effect.

8.5 Disability. For purposes of this Agreement, "**Disability**" means your inability to perform satisfactorily all of your usual services for the Company because you have become permanently

disabled within the meaning of any policy of disability income insurance covering employees of the Company then in force. In the event the Company has no policy of disability income insurance covering employees of the Company in force when you become disabled, then such term shall mean your permanent and total disability within the meaning of Section 22(e)(3) of the Code.

8.6 Good Reason. For purposes of this Agreement, you shall have "**Good Reason**" for resignation from employment with the Company if any of the following actions are taken by the Company without your prior written consent: (a) a material reduction in your Base Salary, which the parties agree is a reduction of at least 10% of your Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated employees); (b) a material reduction in your duties (including responsibilities and/or authorities) other than the transition of duties, responsibilities and authorities to others within the Company as the Company's management team evolves (excluding oversight and management of your primary function); or (c) relocation of your principal place of employment to a place that increases your one-way commute by more than fifty (50) miles as compared to your then-current principal place of employment immediately prior to such relocation; provided that any relocation back to the Company office from remote work will not be considered a relocation of your principal place of employment with the Company for purposes of this definition. In order to resign for Good Reason, you must provide written notice to the Company's CEO within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, allow the Company at least 30 days from receipt of such written notice to cure such event, and if such event is not reasonably cured within such period, you must resign from all positions you then hold with the Company not later than 90 days after the expiration of the cure period.

8.7 Involuntary Termination. For purposes of this Agreement, "**Involuntary Termination**" means a termination of your employment with the Company pursuant to either (i) a termination initiated by the Company without Cause, or (ii) your resignation for Good Reason, and provided in either case such termination constitutes a Separation from Service. An Involuntary Termination does not include any other termination of your employment, including a termination due to your death or Disability.

8.8 Plan. For purposes of this Agreement, "**Plan**" means the Company's 2021 Equity Incentive Plan (as it may be amended from time to time).

8.9 Separation from Service. For purposes of this Agreement, "Separation from Service" means a "separation from service", as defined under Treasury Regulation Section 1.409A-1(h).

9. Proprietary Information Obligations. As a condition of employment, you shall execute and abide by the Company's standard form of Proprietary Information and Inventions Agreement (the "**Confidentiality Agreement**"), attached as **Exhibit A**. In your work for the Company, you will be expected not to use or disclose any confidential information, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company. You agree that you will not bring onto Company premises any unpublished documents or property belonging to any former employer or other person to whom you have an obligation of confidentiality. You hereby represent that you have

disclosed to the Company any contract you have signed that may restrict your activities on behalf of the Company.

10. Section 409A. It is intended that all of the severance benefits and other payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Code Section 409A provided under Treasury Regulations Sections 1.409A 1(b)(4), 1.409A 1(b)(5) and 1.409A 1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions, and to the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A. For all purposes of Code Section 409A (including, without limitation, for purposes of Treasury Regulations Sections 1.409A 2(b)(2)(i) and (iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Code Section 409A(a)(2)(B)(i), and if any of the payments upon Separation from Service set forth herein and/or under any other agreement with the Company are deemed to be "deferred compensation," then to the extent delayed commencement of any portion of such payments is required in order to avoid a prohibited distribution under Code Section 409A(a)(2)(B)(i) and the related adverse taxation under Section 409A, such payments shall not be provided to you prior to the earliest of (i) the first date following expiration of the six-month period following the date of your Separation from Service with the Company, (ii) the date of your death or (iii) such earlier date as permitted under Section 409A without the imposition of adverse taxation. Upon the first business day following the expiration of such applicable Code Section 409A(a)(2)(B)(i) period, all payments deferred pursuant to this Paragraph shall be paid in a lump sum to you, and any remaining payments due shall be paid as otherwise provided herein or in the applicable agreement. No interest shall be due on any amounts so deferred. If the severance benefits are not covered by one or more exemptions from the application of Section 409A and the Release Deadline occurs in the calendar year following the calendar year of your Separation from Service, the Separation Agreement will not be deemed effective any earlier than the Release Deadline for purposes of determining the timing of provision of any severance benefits.

11. Section 280G.

If any payment or benefit you will or may receive from the Company or otherwise (a "**280G Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then any such 280G Payment pursuant to this Agreement or otherwise (a "**Payment**") shall be equal to the Reduced Amount. The "**Reduced Amount**" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "**Reduction Method**") that results in the greatest economic benefit for you. If more than one method of reduction

will result in the same economic benefit, the items so reduced will be reduced pro rata (the "**Pro Rata Reduction Method**").

Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

Unless you and the Company agree on an alternative accounting firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change in Control transaction triggering the Payment shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other reasonable time as requested by you or the Company.

If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section so that no portion of the remaining Payment is subject to the Excise Tax). For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) in the first paragraph of this Section, you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

12. Arbitration of All Disputes.

12.1 Agreement to Arbitrate. To ensure the timely and economical resolution of disputes that may arise between you and the Company, both you and the Company mutually agree that pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by applicable law, you and the Company will submit solely to final, binding and confidential arbitration any and all disputes, claims, or causes of action arising from or relating to: **(i)** the negotiation, execution, interpretation, performance, breach or enforcement of this Agreement; or **(ii)** your employment with the Company (including but not limited to all statutory claims); or **(iii)** the termination of your employment with the Company (including but not limited to all statutory claims). **BY AGREEING TO THIS ARBITRATION PROCEDURE, BOTH YOU AND THE COMPANY WAIVE THE RIGHT TO RESOLVE ANY SUCH DISPUTES THROUGH A TRIAL BY JURY OR JUDGE OR THROUGH AN ADMINISTRATIVE PROCEEDING.**

12.2 Arbitrator Authority. The arbitrator shall have the sole and exclusive authority to determine whether a dispute, claim or cause of action is subject to arbitration under this Section and to determine any procedural questions which grow out of such disputes, claims or causes of action and bear on their final disposition.

12.3 Individual Capacity Only. All claims, disputes, or causes of action under this Section, whether by you or the Company, must be brought solely in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences in this Section are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration.

12.4 Arbitration Process. Any arbitration proceeding under this Section shall be presided over by a single arbitrator and conducted by Judicial Arbitration and Mediation Services, Inc. ("**JAMS**") in San Diego, California, or as otherwise agreed to by you and the Company, under the then applicable JAMS rules for the resolution of employment disputes (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party's own expense. The arbitrator shall: **(i)** have the authority to compel adequate discovery for the resolution of the dispute; **(ii)** issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award; and **(iii)** be authorized to award any or all remedies that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the amount of court fees that would be required of you if the dispute were decided in a court of law.

12.5 Excluded Claims. This Section shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, the California Fair Employment and Housing Act, as amended, and the California Labor Code, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration and such applicable law is not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the "**Excluded Claims**"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be filed with a court, while any other claims will remain subject to mandatory arbitration.

12.6 Injunctive Relief and Final Orders. Nothing in this Section is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any final award in any arbitration proceeding hereunder may be entered as a judgment in the federal and state courts of any competent jurisdiction and enforced accordingly.

13. General Provisions. This Agreement, together with the Confidentiality Agreement, constitutes the entire agreement between you and the Company with regard to this subject matter and is the complete, final, and exclusive embodiment of the parties' agreement with regard to this subject matter. This Agreement is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. Modifications or amendments to this Agreement, other than those changes expressly reserved to the Company's discretion in this letter, must be made in a written agreement signed by you

and the Company's CEO. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement. This Agreement is intended to bind and inure to the benefit of and be enforceable by you and the Company, and their respective successors, assigns, heirs, executors and administrators. The Company may freely assign this Agreement, without your prior written consent. You may not assign any of your duties hereunder and you may not assign any of your rights hereunder without the written consent of the Company. This Agreement shall become effective as of the IPO Date and shall terminate upon your termination of employment with the Company. The obligations as forth under Sections 7, 8, 9, 10, 11, 12, and 13 will survive the termination of this Agreement. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

If you have any questions about this Agreement, please do not hesitate to call me.

Best regards,

LONGBOARD PHARMACEUTICALS, INC.

/s/ Kevin Lind
Kevin Lind
President and Chief Executive Officer

Accepted and agreed:

/s/ Philip Perera
Philip Perera, M.D.

Date: 3/1/2021

Exhibit A

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

11.

Longboard Pharmaceuticals, Inc.

March 1, 2021

Brandi Roberts
via email

Re: Offer of Employment

Dear Brandi:

You are currently employed by Longboard Pharmaceuticals, Inc. (the "**Company**") under the terms of an offer letter between you and the Company dated January 15, 2021 (the "**Offer Letter**"). The Company is amending and restating the terms of the Offer Letter to reflect your continued employment terms as set forth in this employment agreement (the "**Agreement**"). Provided you accept this Agreement by signing and returning it to the Company, this Agreement will become effective as of the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Company's common stock, pursuant to which such common stock is priced for the initial public offering (the "**IPO Date**") and upon such IPO Date, shall supersede and replace your Offer Letter in its entirety, and this Agreement shall then govern the terms of your employment with the Company.

1. Employment by the Company. Your employment with the Company shall continue in the position of Chief Financial Officer ("**CFO**"). This is an exempt position, and during your employment with the Company, you will devote your best efforts and substantially all of your business time and attention to the business of the Company, except for approved vacation periods and reasonable periods of illness or other incapacities permitted by the Company's general employment policies. You shall perform such duties as are required by the Company's Chief Executive Officer ("**CEO**"), to whom you will report. Your primary work location shall be the Company's office located in San Diego, California. The Company reserves the right to reasonably require you to perform your duties at places other than your primary office location from time to time, and to require reasonable business travel. The Company may modify your job title and duties as it deems necessary and appropriate in light of the Company's needs and interests from time to time.

2. Compensation.

2.1 Base Salary. For services to be rendered hereunder, you shall receive a base salary at the rate of $400,000 per year (the "**Base Salary**"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule.

2.2 Annual Bonus. Beginning with calendar year 2021 and for each subsequent year of employment, you will be eligible for an annual discretionary bonus with a target amount of 40% of your then current annual Base Salary, prorated for the number of days employed in the applicable calendar year (the **"Annual Bonus"**). Whether you receive an Annual Bonus for any given year, and the amount of any such Annual Bonus, will be determined by the Company's Board of Directors (the "**Board**") (and/or its Compensation Committee) in its discretion based upon the achievement of corporate and/or individual objectives and milestones that are determined in the sole discretion of the Board (and/or its Compensation Committee). You must continue to be employed through the date the Annual Bonus is paid in order to earn such bonus. The Annual Bonus, if earned, shall be paid to you in a lump sum no

later than March 15th of the calendar year that follows the performance year, subject to applicable payroll deductions and withholdings.

2.3 Equity. You were previously granted certain equity awards covering the Company's common stock under the Company's 2020 Equity Incentive Plan. Your equity awards will continue to be governed by the terms of the 2020 Equity Incentive Plan and the grant documents thereunder. You will remain eligible to receive future equity awards at the discretion of the Board or the Compensation Committee.

3. Reasonable Business Expenses. You will be eligible for reimbursement of all reasonable, necessary and documented out-of-pocket business, entertainment, and travel expenses incurred by you in connection with the performance of your duties hereunder in accordance with the Company's expense reimbursement policies and procedures.

4. Company Policies; Standard Company Benefits. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control. You shall be entitled to participate in all employee benefit programs for which you are eligible under the terms and conditions of the benefit plans that may be in effect from time to time and provided by the Company to its employees. The Company reserves the right to cancel or change the benefit plans or programs it offers to its employees at any time.

5. At-Will Employment. Your employment relationship is at-will. Either you or the Company may terminate the employment relationship at any time, with or without cause or advance notice. Upon termination of your employment for any reason, you shall resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the date of termination.

6. Outside Activities During Employment. Except with the prior written consent of the Company, you will not during the term of your employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which you are a passive investor. You may engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of your duties hereunder. You agree not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise. Ownership by you in professionally managed funds over which you do not have control or discretion in investment decisions, or, an investment of less than one percent (1%) of the outstanding shares of capital stock of any corporation with one or more classes of its capital stock listed on a national securities exchange or publicly traded on a national securities exchange or in the over-the-counter market shall not constitute a breach of this Section.

7. Termination; Severance.

7.1 Term and Termination. The term of this Agreement (the "**Term**") shall be the period commencing on the IPO Date and ending on the date that this Agreement is terminated by either party pursuant to the provisions of this Agreement. You are employed at-will, meaning that, subject to the terms and conditions set forth herein, either the Company or you may terminate your employment at any time, with or without Cause.

7.2 Compensation upon Termination. Upon the termination of your employment for any reason, the Company shall pay you all of your accrued and unpaid wages earned through your last day of employment (the "**Separation Date**").

7.3 Involuntary Termination Unrelated to a Change in Control. If you are subject to an Involuntary Termination (that does not occur within the Change in Control Period (as defined below)), and provided that you remain in compliance with the terms of this Agreement (including the conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "**Severance Benefits**"):

(a) Cash Severance. The Company shall pay you, as severance,

(i) the equivalent of ***twelve (12) months*** (the "**Severance Period**") of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings (the "**Severance**"). The Severance will be paid as a continuation on the Company's regular payroll, beginning no later than the first regularly-scheduled payroll date following the sixtieth (60^{th}) day after your Separation from Service, provided the Separation Agreement (as discussed in Section 7.7) has become effective; and

(ii) a pro-rata portion of your Annual Bonus for the calendar year in which the Involuntary Termination occurs, based on actual performance results for such year as determined by the Board or the Compensation Committee (determined by multiplying the amount of your Annual Bonus which would be due for the full calendar year by a fraction, (i) the numerator of which is the number of days during the calendar year that you were employed by the Company and (ii) the denominator of which is three hundred sixty-five (365)), if any (the "**Pro-Rata Bonus**"), payable at the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, but in no event prior to the effective date of the Separation Agreement and no later than March 15 of the year following the year in which your Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. If you are eligible for and timely elect continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 or any state law of similar effect ("**COBRA**") following your Involuntary Termination, the Company will pay your COBRA group health insurance premiums for you and your eligible dependents directly to the insurer until the earliest of (A) the end of the period immediately following your Involuntary Termination that is equal to the Severance Period (the "**COBRA Payment Period**"), (B) the expiration of your eligibility for continuation coverage under COBRA, or (C) the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. For purposes of this Section, references to COBRA premiums shall not include any amounts payable by you under a Section 125 health care reimbursement plan under the Code. Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that it cannot pay the COBRA premiums without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then regardless of whether you elect continued health coverage under COBRA, and in lieu of providing the COBRA premiums, the Company will instead pay you on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings (such amount, the "**Special Severance Payment**"), which payments shall continue until the earlier of expiration of the COBRA Payment Period or the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. On the first payroll date following the effectiveness of the Separation Agreement, the Company will make the first payment to the insurer under this clause (and, in the case of

the Special Severance Payment, such payment will be to you, in a lump sum) equal to the aggregate amount of payments that the Company would have paid through such date had such payments instead commenced on the Separation Date, with the balance of the payments paid thereafter on the schedule described above. If you become eligible for coverage under another employer's group health plan, you must immediately notify the Company of such event, and all payments and obligations under this subsection shall cease.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding options, restricted stock unit awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to the Involuntary Termination, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional six (6) months of service with the Company as of the Separation Date. For the avoidance of doubt, equity awards which vest wholly or partially subject to the attainment of performance goals are not eligible to accelerate vesting pursuant to this subsection.

7.4 Involuntary Termination in Connection with a Change in Control. If you are subject to an Involuntary Termination during the Change in Control Period, and provided that you remain in compliance with the terms of this Agreement (including the conditions described in Section 7.7 below), the Company shall provide you with the following benefits (the "***CIC Severance Benefits***")

(a) Cash Severance. The Company shall pay you, as severance,

(i) an amount equal to 100% of your Base Salary in effect as of the Separation Date, subject to standard payroll deductions and withholdings, *plus* 100% of your target Annual Bonus amount for the year in which the Involuntary Termination occurs, in a lump sum on the first regularly scheduled payroll date following the Release Deadline, but in no event later than March 15 of the year following the year in which your Separation from Service occurs; and

(ii) Pro-Rata Bonus, payable upon the later of (x) the same time annual bonuses for such year are paid to actively-employed senior executives of the Company, (y) the first payroll date following the effective date of the Separation Agreement, but in either case, no later than March 15 of the year following the year in which Separation from Service occurs.

(b) Payment of Continued Group Health Plan Benefits. You will receive the payment for continued group health plan benefits described in Section 7.3(b) above.

(c) Accelerated Vesting. The vesting and exercisability of all outstanding time-based stock options and other time-based equity awards covering the Company's common stock and restricted stock units that are held by you as of immediately prior to the Separation Date shall accelerate vesting in full effective as of the later of the Separation Date or the effective date of the Change in Control (the "**CIC Acceleration Benefit**"). For the avoidance of doubt, the CIC Acceleration Benefit is conditioned upon the actual consummation of a Change in Control.

7.5 Termination due to Death or Disability. If your employment with the Company terminates due to your death or Disability, then (a) the vesting and exercisability of all outstanding options, restricted stock awards, and other equity awards covering the Company's common stock that are held by you as of immediately prior to your death or Disability, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional

twenty-four (24) months of service with the Company as of the Separation Date, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits or CIC Acceleration Benefit.

7.6 Termination for Cause; Resignation Without Good Reason. If you resign without Good Reason, the Company terminates your employment for Cause, or upon dissolution or cessation of the Company, then (a) you will no longer vest in any equity awards, (b) all payments of compensation by the Company to you hereunder will terminate immediately (except as to amounts already earned), and (c) you will not be entitled to any Severance Benefits or CIC Severance Benefits.

7.7 Conditions to Receipt of Severance Benefits. The receipt of the Severance Benefits or CIC Severance Benefits will be subject to you signing and not revoking a separation agreement and general release of claims in a form reasonably satisfactory to the Company (the "**Separation Agreement**") within the time period set forth therein, and allowing such Separation Agreement to become effective pursuant to its terms by no later than the sixtieth (60th) day after the Separation Date ("**Release Deadline**"). No Severance Benefits or CIC Severance Benefits will be paid or provided until the Separation Agreement becomes effective. You shall also resign from all positions and terminate any relationships as an employee, advisor, officer or director with the Company and any of its affiliates, each effective on the Separation Date.

8. Definitions.

8.1 Cause. For purposes of this Agreement, **"Cause"** for termination means: (a) conviction of, or plea of guilty or nolo contendere to, a felony or any crime involving fraud, dishonesty or moral turpitude; (b) participation in any fraud against the Company; (c) material and intentional damage to any property of the Company; (d) willful misconduct, or any violation of Company policy that causes material harm to the Company; (e) breach of this Agreement, the Confidentiality Agreement (as defined below), or any other written agreement with the Company; or (f) conduct by you which in the good faith and reasonable determination of the Company demonstrates gross unfitness to serve. For a termination of employment to be for Cause, you must (a) receive a written notice from the Company which indicates in reasonable detail the facts and circumstances claimed to provide a basis for the termination of your employment for Cause; and (b) be provided with an opportunity to cure or resolve, no later than 30 days following the receipt of such notice, the behavior in question (if deemed curable by the Company in its sole discretion).

8.2 Change in Control. For purposes of this Agreement, a "**Change in Control**" shall have the meaning as set forth in the Plan.

8.3 Change in Control Period. For purposes of this Agreement, the "**Change in Control Period**" means the period commencing three (3) months prior to a Change in Control and ending eighteen (18) months following a Change in Control.

8.4 Code. For purposes of this Agreement, **"Code"** means the U.S. Internal Revenue Code of 1986 (as it has been and may be amended from time to time) and any regulations and guidance that has been promulgated or may be promulgated from time to time thereunder and any state law of similar effect.

8.5 Disability. For purposes of this Agreement, "**Disability**" means your inability to perform satisfactorily all of your usual services for the Company because you have become permanently

disabled within the meaning of any policy of disability income insurance covering employees of the Company then in force. In the event the Company has no policy of disability income insurance covering employees of the Company in force when you become disabled, then such term shall mean your permanent and total disability within the meaning of Section 22(e)(3) of the Code.

8.6 Good Reason. For purposes of this Agreement, you shall have "**Good Reason**" for resignation from employment with the Company if any of the following actions are taken by the Company without your prior written consent: (a) a material reduction in your Base Salary, which the parties agree is a reduction of at least 10% of your Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated employees); (b) a material reduction in your duties (including responsibilities and/or authorities) other than the transition of duties, responsibilities and authorities to others within the Company as the Company's management team evolves (excluding oversight and management of your primary function); or (c) relocation of your principal place of employment to a place that increases your one-way commute by more than fifty (50) miles as compared to your then-current principal place of employment immediately prior to such relocation; provided that any relocation back to the Company office from remote work will not be considered a relocation of your principal place of employment with the Company for purposes of this definition. In order to resign for Good Reason, you must provide written notice to the Company's CEO within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, allow the Company at least 30 days from receipt of such written notice to cure such event, and if such event is not reasonably cured within such period, you must resign from all positions you then hold with the Company not later than 90 days after the expiration of the cure period.

8.7 Involuntary Termination. For purposes of this Agreement, "**Involuntary Termination**" means a termination of your employment with the Company pursuant to either (i) a termination initiated by the Company without Cause, or (ii) your resignation for Good Reason, and provided in either case such termination constitutes a Separation from Service. An Involuntary Termination does not include any other termination of your employment, including a termination due to your death or Disability.

8.8 Plan. For purposes of this Agreement, "**Plan**" means the Company's 2021 Equity Incentive Plan (as it may be amended from time to time).

8.9 Separation from Service. For purposes of this Agreement, "Separation from Service" means a "separation from service", as defined under Treasury Regulation Section 1.409A-1(h).

9. Proprietary Information Obligations. As a condition of employment, you shall execute and abide by the Company's standard form of Proprietary Information and Inventions Agreement (the "**Confidentiality Agreement**"), attached as **Exhibit A**. In your work for the Company, you will be expected not to use or disclose any confidential information, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company. You agree that you will not bring onto Company premises any unpublished documents or property belonging to any former employer or other person to whom you have an obligation of confidentiality. You hereby represent that you have

disclosed to the Company any contract you have signed that may restrict your activities on behalf of the Company.

10. Section 409A. It is intended that all of the severance benefits and other payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Code Section 409A provided under Treasury Regulations Sections 1.409A 1(b)(4), 1.409A 1(b)(5) and 1.409A 1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions, and to the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A. For all purposes of Code Section 409A (including, without limitation, for purposes of Treasury Regulations Sections 1.409A 2(b)(2)(i) and (iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Code Section 409A(a)(2)(B)(i), and if any of the payments upon Separation from Service set forth herein and/or under any other agreement with the Company are deemed to be "deferred compensation," then to the extent delayed commencement of any portion of such payments is required in order to avoid a prohibited distribution under Code Section 409A(a)(2)(B)(i) and the related adverse taxation under Section 409A, such payments shall not be provided to you prior to the earliest of (i) the first date following expiration of the six-month period following the date of your Separation from Service with the Company, (ii) the date of your death or (iii) such earlier date as permitted under Section 409A without the imposition of adverse taxation. Upon the first business day following the expiration of such applicable Code Section 409A(a)(2)(B)(i) period, all payments deferred pursuant to this Paragraph shall be paid in a lump sum to you, and any remaining payments due shall be paid as otherwise provided herein or in the applicable agreement. No interest shall be due on any amounts so deferred. If the severance benefits are not covered by one or more exemptions from the application of Section 409A and the Release Deadline occurs in the calendar year following the calendar year of your Separation from Service, the Separation Agreement will not be deemed effective any earlier than the Release Deadline for purposes of determining the timing of provision of any severance benefits.

11. Section 280G.

If any payment or benefit you will or may receive from the Company or otherwise (a "**280G Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then any such 280G Payment pursuant to this Agreement or otherwise (a "**Payment**") shall be equal to the Reduced Amount. The "**Reduced Amount**" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "**Reduction Method**") that results in the greatest economic benefit for you. If more than one method of reduction

will result in the same economic benefit, the items so reduced will be reduced pro rata (the "**Pro Rata Reduction Method**").

Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

Unless you and the Company agree on an alternative accounting firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change in Control transaction triggering the Payment shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other reasonable time as requested by you or the Company.

If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section so that no portion of the remaining Payment is subject to the Excise Tax). For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) in the first paragraph of this Section, you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

12. Arbitration of All Disputes.

12.1 Agreement to Arbitrate. To ensure the timely and economical resolution of disputes that may arise between you and the Company, both you and the Company mutually agree that pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by applicable law, you and the Company will submit solely to final, binding and confidential arbitration any and all disputes, claims, or causes of action arising from or relating to: **(i)** the negotiation, execution, interpretation, performance, breach or enforcement of this Agreement; or **(ii)** your employment with the Company (including but not limited to all statutory claims); or **(iii)** the termination of your employment with the Company (including but not limited to all statutory claims). **BY AGREEING TO THIS ARBITRATION PROCEDURE, BOTH YOU AND THE COMPANY WAIVE THE RIGHT TO RESOLVE ANY SUCH DISPUTES THROUGH A TRIAL BY JURY OR JUDGE OR THROUGH AN ADMINISTRATIVE PROCEEDING.**

12.2 Arbitrator Authority. The arbitrator shall have the sole and exclusive authority to determine whether a dispute, claim or cause of action is subject to arbitration under this Section and to determine any procedural questions which grow out of such disputes, claims or causes of action and bear on their final disposition.

12.3 Individual Capacity Only. All claims, disputes, or causes of action under this Section, whether by you or the Company, must be brought solely in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences in this Section are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration.

12.4 Arbitration Process. Any arbitration proceeding under this Section shall be presided over by a single arbitrator and conducted by Judicial Arbitration and Mediation Services, Inc. ("**JAMS**") in San Diego, California, or as otherwise agreed to by you and the Company, under the then applicable JAMS rules for the resolution of employment disputes (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party's own expense. The arbitrator shall: **(i)** have the authority to compel adequate discovery for the resolution of the dispute; **(ii)** issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award; and **(iii)** be authorized to award any or all remedies that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the amount of court fees that would be required of you if the dispute were decided in a court of law.

12.5 Excluded Claims. This Section shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, the California Fair Employment and Housing Act, as amended, and the California Labor Code, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration and such applicable law is not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the "**Excluded Claims**"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be filed with a court, while any other claims will remain subject to mandatory arbitration.

12.6 Injunctive Relief and Final Orders. Nothing in this Section is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any final award in any arbitration proceeding hereunder may be entered as a judgment in the federal and state courts of any competent jurisdiction and enforced accordingly.

13. General Provisions. This Agreement, together with the Confidentiality Agreement, constitutes the entire agreement between you and the Company with regard to this subject matter and is the complete, final, and exclusive embodiment of the parties' agreement with regard to this subject matter. This Agreement is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. Modifications or amendments to this Agreement, other than those changes expressly reserved to the Company's discretion in this letter, must be made in a written agreement signed by you

and the Company's CEO. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement. This Agreement is intended to bind and inure to the benefit of and be enforceable by you and the Company, and their respective successors, assigns, heirs, executors and administrators. The Company may freely assign this Agreement, without your prior written consent. You may not assign any of your duties hereunder and you may not assign any of your rights hereunder without the written consent of the Company. This Agreement shall become effective as of the IPO Date and shall terminate upon your termination of employment with the Company. The obligations as forth under Sections 7, 8, 9, 10, 11, 12, and 13 will survive the termination of this Agreement. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

If you have any questions about this Agreement, please do not hesitate to call me.

Best regards,

LONGBOARD PHARMACEUTICALS, INC.

/s/ Kevin Lind
Kevin Lind
President and Chief Executive Officer

Accepted and agreed:

/s/ Brandi Roberts
Brandi Roberts

Date: 3/1/2021

Exhibit A

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

11.

EXCHANGE AGREEMENT

THIS EXCHANGE AGREEMENT (this "***Agreement***") is made as of March 5 2021, by and among the investors listed on **Exhibit A** attached hereto (each an "***Investor***" and together, the "***Investors***") and Longboard Pharmaceuticals, Inc., a Delaware corporation (the "***Company***").

RECITALS

A. Each Investor holds that number of shares of the Company's Series A Preferred Stock, par value $0.0001 per share ("***Series A Preferred***"), set forth opposite such Investor's name on **Exhibit A** attached hereto (the "***Preferred Exchange Stock***").

B. Subject to the terms and conditions and limitations set forth herein, each Investor desires to exchange up to the number of shares of Preferred Exchange Stock set forth opposite such Investor's name on **Exhibit A** attached hereto for shares of a newly designated Non-Voting Common Stock of the Company, par value $0.0001 per share (the "***Non-Voting Common***").

NOW THEREFORE, in consideration of the foregoing premises and the respective representations and warranties, covenants and agreements contained herein, the receipt and sufficiency of which is hereby acknowledged, the Company and each of the Investors agree as follows:

Article I: Exchange

1.1 Upon the terms and subject to the conditions herein contained, at the Closing (as defined below), the Applicable Number of Shares (defined below) of Preferred Exchange Stock held by each investor shall, automatically, and without any further action on the part of the Investors or the Company, be exchanged for shares of Non-Voting Common at a ratio of 1.38 shares of Non-Voting Common for every single share of Preferred Exchange Stock (rounded down to the nearest whole share). Each Investor shall assign and deliver to the Company Preferred Exchange Stock (including any stock certificates representing the Applicable Number of Shares) for cancellation by the Company, free and clear of any mortgage, lien, pledge, charge, security interest, encumbrance, title retention agreement, option, equity or other adverse claim thereto (collectively, "***Liens***"), other than restrictions on transfer under applicable securities laws, together with any documents of conveyance or transfer that the Company may deem reasonably necessary or desirable, and in exchange therefor the Company shall issue to each Investor 1.38 shares of Non-Voting Common (rounded down to the nearest whole share) for each single share of Preferred Exchange Stock exchanged hereunder. The "***Applicable Number of Shares***" shall mean, for each Investor, such number of shares of Preferred Exchange Stock (which may be zero) as would be necessary to cause such Investor, immediately following the closing of the IPO, to beneficially own (for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder (collectively, the "***Exchange Act***")), when aggregated with such Investor's affiliates who are also party hereto, not more than 9.99% (or such other amount as may be agreed to by the Company and the applicable Investor) of the Company's Voting Common Stock. The exchange of the Preferred Exchange Stock for the Non-Voting Common pursuant to this Agreement is referred to herein as the "***Exchange***."

1.2 Each Investor severally, and not jointly, shall be liable for only the Exchange that relates to such Investor. The Company's agreement with each of the Investors is a separate agreement, and the Exchange with respect to each Investor is a separate exchange. The obligations of each Investor hereunder are expressly not conditioned on the exchange of the Non-Voting Stock by any or all of the other Investors.

1.3 Subject to the satisfaction of each of the conditions set forth in Article IV and Article V hereof (to the extent not waived in accordance therewith), the closing of the Exchange (the "***Closing***") shall take place remotely immediately prior to the closing of a firm-commitment underwritten public offering of the Company's Voting Common Stock pursuant to the Company's Registration Statement on Form S-1 (file number 333-253329) (the "***IPO***") (the date on which such Closing occurs is hereinafter referred to as the "***Closing Date***").

Article II: Covenants, Representations and Warranties of Each Investor

Each Investor, severally and not jointly, hereby covenants as follows, and makes the following representations and warranties, each of which is and shall be true and correct on the date hereof and at the Closing, to the Company and all such covenants, representations and warranties shall survive the Closing.

2.1. **Power and Authorization.** The Investor is duly organized, validly existing and in good standing, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby.

2.2. **Valid and Enforceable Agreement; No Violations.** This Agreement has been duly executed and delivered by the Investor and constitutes a legal, valid and binding obligation of the Investor, enforceable against the Investor in accordance with its terms, except that such enforcement may be subject to (a) bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws affecting or relating to enforcement of creditors' rights generally, and (b) general principles of equity, whether such enforceability is considered in a proceeding at law or in equity (the "***Enforceability Exceptions***"). This Agreement and the consummation of the Exchange will not materially violate, conflict with or result in a breach of or default under (i) the Investor's organizational documents, (ii) any agreement or instrument to which the Investor is a party or by which the Investor or any of its assets are bound, or (iii) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Investor.

2.3. **Title to Preferred Exchange Stock.** The Investor is the sole legal and beneficial owner of the Preferred Exchange Stock set forth opposite such Investor's name on **Exhibit A** hereto. The Investor has good and valid title to its Preferred Exchange Stock, free and clear of any Liens, other than restrictions on transfer under applicable securities. The Investor has not, in whole or in part, except as described in the preceding sentence, (a) assigned, transferred, hypothecated, pledged, exchanged, syndicated, endorsed or otherwise disposed of any of its Preferred Exchange Stock or any of its rights in any of its Preferred Exchange Stock, or (b) given any person or entity any transfer order, power of attorney, endorsement or other authority of any nature whatsoever with respect to its Preferred Exchange Stock. Upon the Investor's delivery of its Preferred Exchange Stock to the Company pursuant to the Exchange, the Preferred Exchange Stock shall be free and clear of all Liens created by the Investor, other than restrictions on transfer under applicable securities laws.

2.4. **No Reliance.** The Investor is not relying, and has not relied, upon any statement, advice (whether accounting, tax, financial, legal or other), representation or warranty made by the Company or any of its affiliates or representatives, except for the representations and warranties made by the Company in this Agreement.

2.5. **Tax Consequences of the Exchange.** The Investor understands that the tax consequences of the Exchange will depend in part on its own tax circumstances. The Investor acknowledges that it must consult its own tax adviser about the federal, foreign, state and local tax consequences peculiar to its circumstances.

2.6. **No Public Market.** The Investor acknowledges and agrees that no public market exists for the Non-Voting Common and no public market is expected to develop for the Non-Voting Common.

2.7. **Transfer Restrictions**. Each Investor acknowledges and agrees as follows:

(a) The Non-Voting Common and the Conversion Shares have not been registered for sale under the Securities Act of 1933, as amended (the "***Securities Act***") in reliance on Section 3(a)(9) of the Securities Act; the Company does not currently intend to register the Non-Voting Common or the Conversion Shares under the Securities Act at any time in the future. The Investor understands that the Non-Voting Common are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Investor must hold the Non-Voting Common indefinitely unless they are registered with the Securities and Exchange Commission (the "***SEC***") and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Investor acknowledges that the Company has no obligation to register or qualify the Non-Voting Common, or the Conversion Shares, except as set forth in that certain Investors' Rights Agreement, dated October 27, 2020, by and among the Company and the investors listed on Schedule A attached thereto. The Investor further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Non-Voting Common, and on requirements relating to the Company which are outside of the Investor's control, and which the Company is under no obligation and may not be able to satisfy.

(b) The Investor understands that the Non-Voting Common and the Conversion Shares may be notated with one or all of the following legends:

(i) "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, 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 SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED."

(ii) Any legend or legends currently set forth on the certificates of the Preferred Exchange Stock held by the Investor immediately prior to the Exchange.

2.8. **No Remuneration**. Neither the Investor nor any of its affiliates, nor any person acting on behalf of or for the benefit of any of the forgoing, has paid or given, or agreed to pay or give, directly or indirectly, any commission or other remuneration (within the meaning of Section 3(a)(9) of the Securities Act and the rules and regulations of the SEC promulgated thereunder) for soliciting the Exchange, and the Investor has received no additional consideration for the Preferred Exchange Stock other than the Non-Voting Common.

Article III: Covenants, Representations and Warranties of the Company

The Company hereby covenants as follows, and makes the following representations and warranties, each of which is and shall be true and correct on the date hereof and at the Closing, to each Investor, and all such covenants, representations and warranties shall survive the Closing.

3.1. **Power and Authorization.** The Company is duly incorporated, validly existing and in good standing under the laws of its state of incorporation, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby.

3.2. **Valid and Enforceable Agreement; No Violations.** This Agreement has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against it in accordance with its terms, except that such enforcement may be subject to the Enforceability Exceptions. The issuance of the Non-Voting Common and the Conversion Shares have been duly authorized by the Company. This Agreement, the issuance of the Non-Voting Common and consummation of the Exchange will not violate, conflict with or result in a breach of or default under (a) the charter, bylaws or other organizational documents of the Company, (b) any agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound, or (c) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Company.

3.3. **Validity of Underlying Common Stock.** The Non-Voting Common will, at the Closing, be convertible into shares of the Company's Voting Common Stock, par value $0.0001 (the "***Conversion Shares***"), in accordance with the Company's Amended and Restated Certificate of Incorporation then in effect (as it may be amended, and/or amended and restated or otherwise modified from time to time, the "***Charter***"). The Conversion Shares have been duly authorized and reserved by the Company for issuance upon conversion of the Non-Voting Common, and, when issued upon conversion of the Non-Voting Common in accordance with the Charter, will be validly issued, fully paid and non-assessable, and the issuance of the Conversion Shares will not be subject to any preemptive, participation, rights of first refusal or other similar rights.

3.4. **Validity of the Non-Voting Common.** The Non-Voting Common to be issued pursuant to this Agreement at the Closing (a) have been duly authorized by the Company and, upon their issuance pursuant to the Exchange in accordance with the terms of this Agreement, the Non-Voting Common will be validly issued, fully-paid and non-assessable and (b) will not, as of the date of issuance, be subject to any preemptive, participation, rights of first refusal or other similar rights.

Article IV: Conditions to Company's Obligations at Closing

The Company's obligation to complete the Exchange and deliver the Non-Voting Common to each Investor in exchange for the Preferred Exchange Stock shall be subject to the following conditions to the extent not waived by the Company:

4.1. **Representation and Warranties**. The representations and warranties made by the Investors in Article II hereof shall be true and correct in all respects as of, and as if made on, the date of this Agreement and as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct as of such earlier date.

4.2. **Performance**. Each Investor shall have performed in all material respects all obligations and covenants herein required to be performed by it at or prior to the Closing.

Article V: Conditions to Investors' Obligations at Closing

Each Investor's obligation to deliver the Preferred Exchange Stock and accept delivery of the Non-Voting Common and to effect the Exchange shall be subject to the following conditions to the extent not waived by the Investors:

5.1. **Representations and Warranties**. The representations and warranties made by the Company in Article III hereof shall be true and correct in all material respects (except to the extent any such representation and warranty is qualified by materiality, in which case, such representation and warranty shall be true and correct in all respects as so qualified) as of, and as if made on, the date of this Agreement and as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct as of such earlier date.

5.2. **Performance**. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it at or prior to the Closing.

5.3. **Judgments**. No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, or any order of or by any governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby.

5.4. **Amended and Restated Certificate of Incorporation**. The Company shall have filed the Charter designating the rights of the Non-Voting Common with the Secretary of State of the State of Delaware, and the Charter shall remain in full force and effect as of the Closing Date.

Article VI: Miscellaneous

6.1. **Entire Agreement.** This Agreement and any other documents and agreements executed in connection with this Agreement or the Exchange embody the entire agreement and understanding of the parties hereto with respect to the subject matter hereof and supersede all prior and contemporaneous oral or written agreements, representations, warranties, contracts, correspondence, conversations, memoranda and understandings between or among the parties or any of their agents, representatives or affiliates relative to such subject matter, including, without limitation, any term sheets, emails or draft documents. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the Company and the Investors and their respective successors and permitted assigns; *provided, however,* that neither this Agreement nor any of the rights hereunder may be assigned without the prior written consent of the other parties to this Agreement, and any attempted assignment of this Agreement or any of such rights without such consent shall be void and of no effect

6.2. **Amendment.** This Agreement may not be amended except by an instrument in writing signed on behalf of each of the parties to this Agreement.

6.3. **Termination**. This Agreement shall automatically terminate and be of no further effect on June 30, 2021, in the event the closing of the IPO shall not have occurred on or before such date.

6.4. **Governing Law**. This Agreement shall in all respects be construed in accordance with and governed by the substantive laws of the State of Delaware, without reference to its choice of law rules.

6.5. **Severability.** Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions of this Agreement or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If a final judgment of a court of competent jurisdiction declares that any term or provision of this Agreement is invalid or unenforceable, the parties agree that the court making such determination shall have the power to limit such term or provision, to delete specific words or phrases or to replace such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be valid and enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term or provision.

6.6. **Waiver of Conflicts.** Each party to this Agreement acknowledges that Cooley LLP ("***Cooley***"), outside general counsel to the Company, has in the past performed and is or may now or in the future represent one or more Investors or their affiliates in matters unrelated to the transactions contemplated by this Agreement (the "***Transactions***"), including representation of such Investors or their affiliates in matters of a similar nature to the Transactions. The applicable rules of professional conduct require that Cooley inform the parties hereunder of this representation and obtain their consent to Cooley's representation of the Company in connection with the negotiation, preparation, execution and performance of this Agreement and the consummation of the Transactions. Cooley has served as outside general counsel to the Company and has negotiated the terms of the Transactions solely on behalf of the Company. The Company and each Investor hereby (a) acknowledge that they have had an opportunity to ask for and have obtained information relevant to such representation, including disclosure of the reasonably foreseeable adverse consequences of such representation; (b) acknowledge that with respect to the negotiation, preparation, execution and performance of this Agreement and the consummation of the Transactions, Cooley has represented solely the Company, and not any Investor or any stockholder, member, beneficiary, director or employee of any Investor; and (c) gives its informed consent to Cooley's representation of the Company in connection with the negotiation, preparation, execution and performance of this Agreement and the consummation of the Transactions.

6.7. **Counterparts.** This Agreement 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. Counterparts may be delivered via 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.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned has executed, or caused to be executed on its behalf by an agent there unto duly authorized, this Exchange Agreement as of the date first above written.

Longboard Pharmaceuticals, Inc.

By: /s/ Kevin Lind
Name: Kevin Lind
Title: President and CEO
Address: 6154 Nancy Ridge Drive
San Diego, CA 92121

IN WITNESS WHEREOF, the undersigned has executed, or caused to be executed on its behalf by an agent there unto duly authorized, this Exchange Agreement as of the date first above written.

INVESTORS:

ZONE II HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
NAME: Philip Dreyfuss
TITLE: Managing Member

HBM HEALTHCARE INVESTMENTS (CAYMAN) LTD.

By: /s/ Jean-Marc LeSieur
NAME: Jean-Marc LeSieur
TITLE: Managing Director

CORMORANT PRIVATE HEALTHCARE FUND III, LP

By: Cormorant Private GP III, LLC

By: /s/ Bihua Chen
NAME: Bihua Chen
TITLE: Managing Member

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP

By: Cormorant Global healthcare GP, LLP

By: /s/ Bihua Chen
NAME: Bihua Chen
TITLE: Managing Member

CRMA SPV, L.P.

By: Cormorant Asset Management, LP

By: /s/ Bihua Chen
NAME: Bihua Chen
TITLE: Its attorney-in-fact

EXHIBIT A

Name and Address of Investor	Preferred Exchange Stock
Zone II Healthcare Holdings, LLC c/o Farallon Capital Management, L.L.C. One Maritime Plaza, Suite 2100 San Francisco, CA 94111 Attn: E-mail:	1,500,000
HBM Healthcare Investments (Cayman) Ltd. Governors Square, Suite #4-212-2 23 Lime Tree Bay Avenue West Bay Grand Cayman, Cayman Islands Attn: Email:	1,000,000
Cormorant Private Healthcare Fund III, LP 200 Clarendon Street, 52nd Floor Boston, MA 02116 Attn:	960,480
Cormorant Global Healthcare Master Fund, LP 200 Clarendon Street, 52nd Floor Boston, MA 02116 Attn:	223,560
CRMA SPV, L.P. 200 Clarendon Street, 52nd Floor Boston, MA 02116 Attn:	15,960
Total	**3,700,000**

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Longboard Pharmaceuticals, Inc.:

We consent to the use of our report dated February 19, 2021, except as to the March Forward Stock Split described in Note 1, which is as of March 8, 2021, with respect to the balance sheet of Longboard Pharmaceuticals, Inc. as of December 31, 2020, the related statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the period January 3, 2020 (inception) through December 31, 2020, and the related notes, included herein and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ KPMG LLP

San Diego, California
March 8, 2021