

As confidentially submitted to the Securities and Exchange Commission on September 24, 2021.

This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

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

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

AN2 Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

82-0606654
(I.R.S. Employer
Identification Number)

**AN2 Therapeutics, Inc.
1800 El Camino Real, Suite D
Menlo Park, California 94027
(650) 331-9090**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Eric Easom
Chief Executive Officer
1800 El Camino Real, Suite D
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(650) 331-9090**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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

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

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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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee ⁽²⁾
Common stock, par value \$0.00001 per share	\$	\$

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

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

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

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

Prospectus (Subject to Completion)

Dated _____, 2021

Shares

AN2 Therapeutics

Common Stock

This is an initial public offering of shares of common stock of AN2 Therapeutics, Inc. We are offering _____ shares of our common stock.

Prior to this offering, there has been no public market for our common stock. We currently expect that the initial public offering price will be between \$ _____ and \$ _____ per share of common stock.

We intend to apply to list our common stock on The Nasdaq Global Market under the symbol "ANTX."

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

Investing in our common stock involves a high degree of risk. See the section titled "[Risk Factors](#)" beginning on page 12.

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.

	<i>Per Share</i>	<i>Total</i>
Public offering price	\$ _____	\$ _____
Underwriting discounts and commissions⁽¹⁾	\$ _____	\$ _____
Proceeds to AN2 Therapeutics, Inc., before expenses	\$ _____	\$ _____

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

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

The underwriters expect to deliver the shares against payment in New York, New York on _____, 2021.

Cowen

**SVB Leerink
Oppenheimer & Co.**

Evercore ISI

Prospectus dated _____, 2021

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Neither we nor the underwriters have authorized anyone to provide you any information or make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations, and prospects may have changed since that date.

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

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus, including the information under the sections titled “Risk Factors,” “Special Note Regarding Forward-Looking Statements,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Unless the context requires otherwise, references in this prospectus to “AN2 Therapeutics,” “AN2,” the “Company,” “we,” “us,” and “our” refer to AN2 Therapeutics, Inc.

Overview

We are a clinical-stage biopharmaceutical company developing treatments for rare, chronic, and serious infectious diseases with high unmet needs. Our initial product candidate is epetraborole, a once-daily oral treatment for patients with chronic non-tuberculous mycobacterial, or NTM, lung disease. Epetraborole has broad spectrum antimycobacterial activity through inhibition of an essential and universal step in bacterial protein synthesis. Its novel mechanism of action is enabled by boron chemistry, our core technology approach. We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the U.S. Food and Drug Administration, or FDA, we believe has the potential to be sufficient for regulatory approval in the United States. Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this trial in [redacted] with topline results anticipated in [redacted]. Based on clinical and preclinical data generated with epetraborole, its novel mechanism of action, and the convenience associated with once-daily, oral dosing, we believe that epetraborole has the potential to become the backbone of a multi-drug treatment regimen for patients suffering from NTM lung disease.

Our Pipeline

We are initially focused on advancing our initial product candidate, epetraborole, to commercialization in NTM lung disease. We are developing epetraborole to treat the most common type of NTM, *Mycobacterium avium* complex, or MAC, which accounts for approximately 80% of NTM lung disease. We have in-licensed the exclusive worldwide development and commercialization rights for epetraborole from Anacor Pharmaceuticals, Inc., or Anacor, acquired by Pfizer Inc. in 2015. In addition to our development and commercial endeavors in NTM lung disease, we intend to develop epetraborole for several global health initiatives, including those addressing melioidosis and tuberculosis, using non-dilutive funding, which we plan to obtain from sources such as public and private agencies and foundations. The below table summarizes our development plans for epetraborole:

EPETRABOROLE	PRECLINICAL	PHASE 1	PHASE 2	PHASE 2/3
NTM LUNG DISEASE				
Treatment-refractory MAC (U.S. + EU)			<i>Initiate Phase 2/3 pivotal clinical trial in { }</i>	
Treatment-refractory MAC (Japan)			<i>Initiate Japan Phase 1 clinical trial in { }</i>	
Treatment-naïve MAC				
<i>Mycobacterium abscessus</i>				
GLOBAL HEALTH				
Melioidosis (IV formulation)				
Tuberculosis				

Our AN2 Drug Discovery Platform

Our core technology approach is based on the use of boron chemistry for our drug research and development initiatives. Boron has both a distinctive ability to bind with biological targets through a reversible covalent bond and the potential to address biological targets that have been difficult to inhibit using traditional carbon-based molecules. Boron chemistry has proven to be a highly productive technology leading to the discovery of many promising drugs, particularly focused in infectious diseases. Pioneering work at Anacor led to the generation of a class of boron compounds including two FDA-approved therapies, Kerydin and Eucrisa. Our founders consist of former leaders at Anacor, including an inventor of epetaborole and a leading infectious disease expert.

We are also actively pursuing the identification of additional antimicrobial product candidates that leverage our boron chemistry capabilities. Once identified, we plan to develop these candidates in NTM lung disease and other rare and chronic infectious diseases. We are also selectively evaluating in-licensing opportunities of development-stage candidates that have the potential to address rare and chronic infectious diseases consistent with our corporate strategy.

Our Market Opportunity

We are developing oral epetaborole for the treatment of NTM lung disease, a rare, chronic, and progressive infectious disease caused by bacteria known as mycobacteria that lead to irreversible lung damage and can be fatal. Unlike most bacteria, which replicate quickly and spread outside of cells, mycobacteria replicate slowly and mostly infect alveolar (lung) macrophages and survive within them. Due to the slow growth and survival within macrophages of mycobacteria, the current standard of care for NTM lung infections requires prolonged treatments, often for 18 months or longer, with a combination of three or more antibiotics. Initially, we are focused on developing epetaborole to treat the most common type of NTM, MAC, which accounts for approximately 80% of NTM lung disease.

There are an estimated 200,000 patients with NTM lung disease in the United States; however, many remain underdiagnosed due to lack of clinical suspicion, nonspecific respiratory symptoms, and underlying lung diseases that are frequent in patients with this infection. Among the approximately 55,000 patients diagnosed with NTM lung disease in the United States, approximately 44,000 patients have MAC lung disease, and approximately 35% of these patients, or 15,000 patients, have treatment-refractory MAC lung disease.

There is only one approved therapy for treatment-refractory MAC lung disease: Arikayce, an inhaled liposomal formulation of amikacin. In a clinical trial, the addition of Arikayce to standard of care combination antibiotic therapy resulted in the resolution of NTM infection in only 29% of patients, leaving more than 70% of treatment-refractory patients with limited or no treatment options. Furthermore, Arikayce has significant tolerability and safety issues, resulting in a boxed warning for risk of increased respiratory adverse reactions, and other warnings and precautions including ototoxicity, a known class effect with aminoglycosides, and other safety findings. Between 20.3% and 33.5% of patients treated with Arikayce in clinical trials discontinued treatment. Despite these shortcomings, Arikayce reported net sales of over \$160 million in the United States in 2020, only its second year on the market. We believe improved treatment of NTM lung disease will require an efficacious, safe, and well-tolerated antibiotic with a novel mechanism of action that is not affected by resistance to existing antibiotics, and that has a convenient, once-daily, oral dose.

Our Solution: Epetaborole

Epetaborole is a boron-containing, orally-available, small molecule inhibitor of bacterial leucyl-tRNA synthetase, or LeuRS, an enzyme that catalyzes the attachment of leucine to transfer RNA, or tRNA, molecules, an essential step in protein synthesis. As shown in Figure A below, epetaborole

forms a complex with a tRNA^{Leu} molecule, trapping the terminal ribonucleotide of tRNA^{Leu} in the editing site of the enzyme, which prevents the synthetic site from attaching leucine to tRNA^{Leu} thus shutting down tRNA leucylation and leading to a block in protein synthesis.

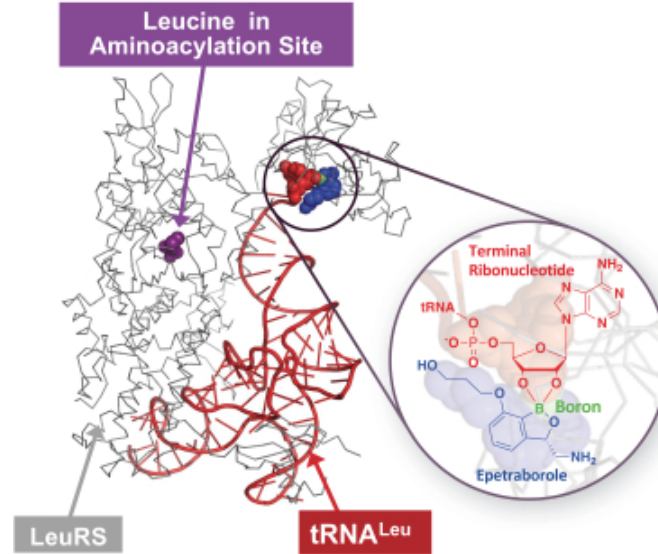


Figure A. Epetraborole inhibits the protein synthesis enzyme leucyl-tRNA synthetase (LeuRS) by binding to the terminal adenosine ribose of tRNA^{Leu} in the editing site.

We believe the development of epetraborole in NTM lung disease represents an attractive opportunity for the following reasons:

- Large market opportunity given the high unmet need in NTM lung disease and the potential for a safe, tolerable, effective, and oral antibacterial drug that could significantly improve patient outcomes;
- Novel mechanism of action with a broad spectrum of antimycobacterial activity;
- Substantial pharmacokinetic and safety data package expected to reduce risk in the development program;
- Convenient once-daily, oral dosing with the aim to serve as the backbone therapy for NTM lung disease; and
- Compatibility with guideline-based combination treatments.

Epetraborole has been administered intravenously or orally to over 200 subjects across six Phase 1 and two truncated Phase 2 clinical trials, where it was generally safe and well-tolerated. Previous results from a Phase 1 clinical trial showed the exposure of epetraborole in alveolar (lung) macrophages, the cells that are infected with mycobacteria in NTM lung disease, was approximately five-fold higher than in plasma. In addition, epetraborole has demonstrated broad antibacterial activity against a panel of 51 isolates of MAC (*M. avium*, *M. intracellulare*, and *M. chimaera*) including against strains that are resistant to antibiotics currently used to treat NTM lung disease. We are currently conducting a double-blind, placebo-controlled Phase 1b dose-ranging study of epetraborole in healthy

volunteers to assess the pharmacokinetics of the molecule at oral doses lower than those previously investigated in prior clinical trials, and in the range of the expected clinical dose, to obtain safety and tolerability data for 28-days of dosing. We anticipate obtaining data in

We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the FDA, we believe has the potential to be sufficient for regulatory approval in the United States. We expect to enroll patients with treatment-refractory MAC lung disease in our planned double-blind, placebo-controlled superiority trial across clinical sites in the United States and Europe. We expect that the primary objective of this planned trial will be to show superiority of epetraborole plus an optimized background regimen, or OBR, consisting of two or more standard of care drugs, compared to placebo plus an OBR, based on a clinically relevant response. We are working with the FDA to finalize the primary endpoint for our planned clinical trial, for which the FDA recommends inclusion of a clinical response measure. We expect that the secondary endpoints will include other microbiological, clinical, and safety measures. Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this trial in with topline results anticipated in

We intend to conduct trials and pursue marketing authorizations with epetraborole in additional geographies outside of the United States and Europe, with an initial focus in Japan. We estimate that there are approximately 220,000 patients with NTM lung disease and approximately 21,000 patients with treatment-refractory MAC lung disease in Japan. We also intend to expand the indications targeted by epetraborole by pursuing development in other mycobacterial diseases, including treatment-naïve NTM lung disease and *Mycobacterium abscessus*, or *M. abscessus*, lung infections. Additionally, we have a strategic partnership with Bii Biosciences Limited, or Bii Biosciences, under which we have licensed out our rights to develop, manufacture, and commercialize epetraborole in China, Hong Kong, Taiwan, and Macau.

Our Strategy

Our mission is to develop novel therapeutics to treat rare, chronic, and serious infectious diseases in areas of high unmet medical need. Key components of our strategy to achieve this goal include:

- Advance epetraborole through clinical development in NTM lung disease with an initial focus on patients with treatment-refractory MAC lung disease;
- Develop epetraborole in additional territories and indications;
- Build and scale organizational capabilities to support commercialization of epetraborole in NTM lung disease;
- Continue to invest in expanding our pipeline of product candidates; and
- Apply our expertise in antimicrobial drug design and development to other global health problems.

Our Team

Our team is led by Eric Easom, M.B.A., M.Eng., our co-founder, president, and chief executive officer. Mr. Easom has over 31 years of leadership experience in the biotechnology and pharmaceutical industry, including the last 15 years in infectious disease. He previously led Anacor's research and development efforts in global health. Paul Eckburg, M.D., our chief medical officer, previously served as chief medical officer at a number of other biotechnology companies and was involved in the development of multiple approved antibiotics. Sanjay Chanda, Ph.D., our chief development officer, previously served as chief development officer at Tioma Therapeutics, Inc. and was senior vice president of drug development at Anacor. Lucy Day, our chief financial officer, previously served as chief financial officer at Anacor. Kevin Krause, M.B.A., our chief strategy officer,

previously served in various roles at Achaogen, Inc., Cerexa, Inc., and Theravance, Inc. and has deep expertise in antibiotic research, development, and commercialization. Our team also includes George Talbot, M.D., FACP, FIDSA, our co-founder and clinical advisor, Joseph Zakrzewski, our co-founder and chairman of the board of directors, and two inventors of epetraborole, Vincent Hernandez, our vice president of chemistry, and Michael R.K. "Dickon" Alley, Ph.D., our head of biology and co-founder.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include, but are not limited to, the following:

- We are a clinical-stage biopharmaceutical company with a limited operating history and no products approved for commercial sale. We have incurred significant losses since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.
- We require substantial additional funding to meet our financial needs and to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce, or altogether cease our current and future product development programs or future commercialization efforts.
- We depend to a large degree on the success of epetraborole, which is in clinical development but has not initiated a Phase 2/3 pivotal clinical trial. If we do not obtain regulatory approval for and successfully commercialize epetraborole or any of our future product candidates or if we experience significant delays in doing so, we may never become profitable.
- If clinical trials of epetraborole or any future product candidate that we may advance to clinical trials fail to demonstrate safety, tolerability, and/or efficacy to the satisfaction of the FDA, the European Medicines Agency, or EMA, the Pharmaceuticals and Medical Devices Agency in Japan, or PMDA, the Therapeutic Goods Administration in Australia, or TGA, or other comparable regulatory authorities, or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of epetraborole or any future product candidate.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.
- We rely on single-sourced third parties to conduct the preclinical and nonclinical studies, clinical trials, and manufacture of our clinical trial material for epetraborole and our future product candidates, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such studies, trials, and manufacturing services or failing to comply with applicable regulatory requirements.
- Even if epetraborole or any of our future product candidates receives marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community necessary for commercial success. If we are unable to establish sales, marketing, and distribution capabilities for epetraborole or our future product candidates, or enter into sales, marketing, and distribution agreements with third parties, we may not be successful in commercializing our product candidates, if and when they are approved.
- We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do.
- We operate with a small team and our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.

- We have identified material weaknesses in our internal control over financial reporting. If we are unable to remediate these material weaknesses, or if we identify additional material weaknesses in the future or otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.
- If we are unable to obtain and maintain patent and other intellectual property protection for our technology, or for epetraborole or our future product candidates, or if the scope of the patent and other intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize epetraborole or our future product candidates, and our ability to generate revenue will be materially impaired.
- Future legislation, and/or regulations and policies adopted by the FDA, the EMA, or comparable regulatory authorities, may increase the time and cost required for us to conduct and complete clinical trials of epetraborole or other future product candidates.

Corporate Information

We were incorporated in February 2017 as a Delaware corporation and launched operations in November 2019. Our principal executive offices are located at 1800 El Camino Real, Suite D, Menlo Park, California 94027 and our telephone number is (650) 331-9090. Our website address is www.an2therapeutics.com. Information contained in, or accessible through, our website is not a part of this prospectus and the inclusion of our website address in this prospectus is only an inactive textual reference.

Trademarks and Service Marks

We use the AN2 Therapeutics logo and other marks as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork, and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks, or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

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

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

particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of accounting standards that have different effective dates for public and private companies until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not “emerging growth companies.”

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 continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than \$250 million as measured on the last business day of our second fiscal quarter or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than \$700 million as measured on the last business day of our second fiscal quarter. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and have reduced disclosure obligations regarding executive compensation. Further, if we are a smaller reporting company with less than \$100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

The Offering

Common stock offered by us	shares
Option to purchase additional shares	We have granted the underwriters an option for a period of 30 days to purchase up to an additional shares of our common stock at the initial public offering price, less underwriting discounts and commissions.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	<p>We estimate that we will receive net proceeds from this offering of approximately \$ million (or approximately \$ million if the underwriters' option to purchase additional shares of our common stock from us is exercised in full), based on the assumed initial public offering price of \$ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.</p> <p>We currently intend to use the net proceeds from this offering, together with our existing cash, to:</p> <ul style="list-style-type: none">▪ fund the clinical development of epetraborole for treatment-refractory NTM lung disease caused by MAC through the receipt of topline data from our planned Phase 2/3 pivotal clinical trial and manufacturing and other pre-commercialization activities;▪ fund the expansion of epetraborole in treatment-refractory NTM lung disease in other key markets, with an initial focus on Japan, as well as in other NTM indications such as treatment-naïve NTM lung disease and <i>M. abscessus</i> lung infections; and▪ fund the further development of our AN2 drug discovery platform and for general corporate purposes, including working capital and operating expenses. <p>See the section titled "Use of Proceeds" for additional information.</p>

Risk factors See the section titled “Risk Factors” and other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.

Proposed Nasdaq Global Market trading symbol “ANTX”

The number of shares of our common stock to be issued and outstanding, pro forma and pro forma as adjusted is based on 5,999,743 shares of common stock outstanding as of December 31, 2020, after giving effect to the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in 2021, and the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of our common stock upon the closing of this offering, and excludes:

- 127,343 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 \$0.99 per share;
- 473,746 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to December 31, 2020, with a weighted-average exercise price of \$15.52 per share;
- shares of our common stock reserved for future issuance under our 2021 Equity Incentive Plan, or 2021 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan; and
- shares of our common stock reserved for issuance under our 2021 Employee Stock Purchase Plan, or ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

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

- the automatic conversion of all outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 (after giving effect to the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in March 2021) into an aggregate of 4,849,064 shares of our common stock upon the closing of this offering;
- no exercise of the outstanding options described above;
- no exercise by the underwriters of their option to purchase additional shares of common stock from us in this offering;
- an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus; and
- the filing and effectiveness of our amended and restated certificate of incorporation to be in effect immediately after the closing of this offering and the adoption of our amended and restated bylaws upon the closing of this offering.

Summary Financial Data

The following tables set forth our summary financial data for the periods and as of the dates indicated. The following summary statements of operations for the years ended December 31, 2019 and 2020 have been derived from our audited financial statements included elsewhere in this prospectus. The following summary balance sheet data as of December 31, 2020 have been derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected for any period in the future. You should read the following summary financial data together with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus. The summary financial data included in this section are not intended to replace the financial statements and are qualified in their entirety by our financial statements and the related notes included elsewhere in this prospectus.

	Year Ended December 31,	
	2019	2020
(in thousands, except share and per share data)		
Statements of Operations		
Operating expenses:		
Research and development	\$ 187	\$ 5,366
Research and development—related party	4,702	653
General and administrative	289	1,265
Total operating expenses	<u>5,178</u>	<u>7,284</u>
Loss from operations	(5,178)	(7,284)
Interest income	—	3
Other expense	(457)	(6,322)
Net loss	<u>(5,635)</u>	<u>(13,603)</u>
Accretion to redemption value and cumulative dividends on preferred stock	(99)	(981)
Net loss attributed to common stockholders	<u>\$ (5,734)</u>	<u>\$ (14,584)</u>
Net loss per share attributable to common shareholders, basic and diluted ⁽¹⁾	<u>\$ (5.29)</u>	<u>\$ (13.36)</u>
Weighted-average number of shares used in computing net loss per share, basic and diluted ⁽¹⁾	<u>1,085,000</u>	<u>1,091,678</u>
Pro forma net loss per share, basic and diluted ⁽²⁾		<u>\$ (4.65)</u>
Pro forma weighted-average number of shares used in computing pro forma net loss per share, basic and diluted ⁽²⁾		<u>3,135,969</u>

(1) See Note 12 to our financial statements included elsewhere in this prospectus for a description of how we compute basic and diluted net loss per common share and the number of shares used in computing these amounts.

(2) The pro forma basic and diluted net loss per share for the year ended December 31, 2020 has been prepared to give effect to an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation for the automatic conversion of 2,044,291 weighted-average outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 into an equivalent number of shares of common stock.

	As of December 31, 2020		
	Actual	Pro Forma ⁽¹⁾	Pro Forma As Adjusted ⁽²⁾⁽³⁾
(in thousands)			
Balance Sheet Data			
Cash	\$ 4,070	\$ 83,803	\$
Working capital ⁽⁴⁾	2,775	82,509	
Total assets	4,234	83,967	
Total liabilities	1,483	1,483	
Redeemable convertible preferred stock	23,070	–	
Accumulated deficit	(20,319)	(20,319)	
Total stockholders' (deficit) equity	(20,319)	82,484	

- (1) The pro forma column in the balance sheet data gives effect to (i) the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of common stock (after giving effect to the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in March 2021), which will occur upon the closing of this offering, and the related reclassification of the carrying value of our redeemable convertible preferred stock to permanent equity upon the closing of this offering and (ii) the filing and effectiveness of our amended and restated certificate of incorporation to be in effect immediately after the closing of this offering.
- (2) The pro forma as adjusted column in the balance sheet data gives effect to (i) the items described in footnote (1) above and (ii) the issuance and sale of _____ shares of our common stock in this offering at the assumed initial public offering price of \$ _____ per share after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) The pro forma as adjusted information is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share would increase or decrease, as applicable, each of our cash, working capital, total assets and total stockholders' deficit by \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease, as applicable, each of our cash, working capital, total assets, and total stockholders' deficit by \$ _____ million and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (4) Working capital is defined as current assets less current liabilities. See our financial statements and the related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you invest in our common stock, you should carefully consider the risks described below together with all of the other information contained in this prospectus, including our audited financial statements and unaudited condensed financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations, and growth prospects. Unless otherwise indicated, references in these risk factors to our business being harmed will include harm to our business, reputation, financial condition, results of operations, and 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 Financial Position and Capital Needs

We are a clinical-stage biopharmaceutical company with a limited operating history and no products approved for commercial sale. We have incurred significant losses since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.

Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a clinical-stage biopharmaceutical company with a limited operating history upon which you can evaluate our business and prospects. We currently have no products approved for commercial sale, have not generated any revenue from the sale of products and have incurred losses in each year since our inception in 2017. In addition, we have limited experience as a company and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical industry. Our initial product candidate, epetraborole, is currently in clinical development. Our net loss was \$5.6 million and \$13.6 million for the years ended December 31, 2019 and 2020, respectively. As of December 31, 2020, we had an accumulated deficit of \$20.3 million. We have funded our operations to date primarily with proceeds from the sale of our redeemable convertible preferred stock. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies, manufacturing, clinical trials, and general and administrative costs associated with our operations. We are still in the early stages of development of epetraborole, and we have not completed development of any product candidates. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year.

We anticipate that our expenses will increase substantially as we:

- continue our ongoing and planned preclinical, nonclinical, and clinical development of epetraborole;
- initiate preclinical and nonclinical studies and clinical trials for product candidates that we may pursue in the future;
- seek to discover and develop future product candidates;
- seek regulatory approvals for epetraborole and any of our future product candidates that successfully complete clinical trials;
- ultimately establish sales, marketing, and distribution infrastructure and scale up external manufacturing capabilities as we move into later-stage clinical trials and look to commercialize any product candidate for which we may obtain regulatory approval and intend to commercialize on our own;

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- maintain, expand, and protect our intellectual property portfolio;
- hire additional clinical, scientific, chemistry, manufacturing, and controls personnel;
- add operational, financial, and management, and compliance information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur additional legal, accounting, information systems, and other expenses associated with operating as a public company.

To become and remain profitable, we must succeed in developing and eventually commercializing drugs that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing preclinical and nonclinical studies and clinical trials of epetaborole and any future product candidates, obtaining regulatory approval, manufacturing, marketing, and selling any products for which we may obtain regulatory approval, as well as discovering and developing additional product candidates. 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 drug development, we are unable to accurately predict the timing or amount of expenses or when, or if, we will be able to achieve profitability. If we are required by regulatory authorities to perform studies in addition to those currently expected, or if there are any delays in the initiation and completion of our clinical trials or the development of epetaborole and any our future product candidates, our expenses could increase.

Even if we 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 common stock and could impair our ability to raise capital, expand our business, maintain our research and development efforts, or continue our operations. A decline in the value of our common stock could also cause you to lose all or part of your investment.

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We commenced active operations in November 2019, and our operations to date have been largely focused on raising capital, identifying and developing epetaborole, broadening our expertise in the development of epetaborole, undertaking preclinical and nonclinical studies, manufacturing clinical trial material, preparing for and initiating clinical trials, and general and administrative costs. As a company, we have not yet demonstrated an ability to successfully complete pivotal clinical trials, obtain regulatory approvals, manufacture a commercial product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

We may encounter unforeseen expenses, difficulties, complications, delays, and other known or unknown factors in achieving our business objectives. We will need to transition successfully at some point from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

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We require substantial additional funding to meet our financial needs and to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce, or altogether cease our current and future product development programs or future commercialization efforts.

We believe that the net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 24 months. However, we will need to obtain substantial additional funding in connection with our continuing operations and planned activities. Our future capital requirements will depend on many factors, including:

- the timing, progress, and results of our ongoing and future clinical trials of epetaborole;
- the costs, timing, and outcome of regulatory review of epetaborole and any of our future product candidates;
- the scope, progress, results, and costs of identifying, obtaining, and conducting preclinical development, laboratory testing, and clinical trials of future product candidates that we may pursue;
- the cost and timetable of manufacturing processes for development, clinical trials, and potential commercial use;
- the number and development requirements of future product candidates that we may pursue;
- the amount of funding that we receive under our non-dilutive funding opportunities, including government awards and government awards that we may apply for;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales, and distribution, for epetaborole or any future product candidates that receive marketing approval;
- the pricing and revenue, if any, received from commercial sales of epetaborole or any future product candidates that receive marketing approval;
- the costs and timing of preparing, filing, and prosecuting patent applications, maintaining, and enforcing our intellectual property rights, and defending any intellectual property-related claims;
- the costs of operating as a public company; and
- the extent to which we acquire or in-license other product candidates and technologies.

Identifying potential product candidates and conducting preclinical testing 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 regulatory approval and achieve product sales. In addition, epetaborole and any of our future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for several years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or altogether cease our research and development programs or future commercialization efforts.

Raising additional capital may cause dilution to our stockholders, including purchasers of shares of our common stock in this offering, restrict our operations, or require us to relinquish rights to our technologies or to epetaborole or any of our future product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings and debt financings. To the extent that we raise

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additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends.

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

We have a contractual commitment to develop epetraborole for global health initiatives, which may affect our ability to develop and commercialize epetraborole in certain countries and may impact our intellectual property rights. Our strategy for our global health initiatives depends on receiving non-dilutive funding, and we as a company have limited experience with this strategy.

Under our Amended and Restated Global Health Agreement, or the Global Health Agreement, with Adjuvant Global Health Technology Fund L.P. and Adjuvant Global Health Technology Fund DE L.P., or together, Adjuvant, we have a contractual commitment to use reasonably diligent endeavors to develop epetraborole and other mutually agreed upon products in melioidosis and tuberculosis for at-risk developing countries at accessible pricing and at reasonable volume, including selling epetraborole and any other mutually agreed upon products in certain target countries at or slightly above the cost of sales, so long as we do not sell products at a loss. Under the Global Health Agreement, we made certain commitments to develop epetraborole and any other mutually agreed-upon products and to pursue regulatory strategies and product registrations. If we do not maintain compliance with these and other program-related global access commitments under the Global Health Agreement, Adjuvant may be entitled to repayment for any portion of its investment that is not used for the purposes outlined in the Global Health Agreement. Our obligations under the Global Health Agreement may affect our ability to commercialize epetraborole in certain countries.

Our strategy for developing epetraborole for global health initiatives, including those addressing melioidosis and tuberculosis depends on receiving non-dilutive funding from sources such as public and private agencies and foundations. We as a company have limited experience with non-dilutive funding, and we may not be able to obtain non-dilutive funding to support our needs. For example, we cannot be certain that there will be grants or funding sources available to support our development efforts, that our grant applications and funding proposals will be successful, or that we will be able to continue satisfying the award criteria of any grants or funding proposals awarded to us. If we fail to receive non-dilutive funding, progress in our global health initiatives may be impaired or delayed.

Risks Related to the Development of Our Current and Future Product Candidates

We depend to a large degree on the success of epetraborole, which is in clinical development but has not initiated a Phase 2/3 pivotal clinical trial. If we do not obtain regulatory approval for and successfully commercialize epetraborole or any of our future product candidates or if we experience significant delays in doing so, we may never become profitable.

We currently have no products approved for sale and have invested a significant portion of our efforts and financial resources on the development of our initial product candidate, epetraborole, as a treatment

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of serious infections caused by NTM lung disease caused by MAC complex bacteria. We expect that a substantial portion of our efforts and expenses over the next few years will be devoted to the development of epetaborole. As a result, our business currently depends heavily on the successful development, regulatory approval, and, if approved, commercialization of epetaborole or any of our future product candidates. We cannot be certain that any product candidates will receive regulatory approval or will be successfully commercialized even if it receives regulatory approval. The research, development, manufacturing, safety, efficacy, labeling, approval, sale, marketing, and distribution of epetaborole or any of our future product candidates are, and will remain, subject to comprehensive regulation by the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or the EMA, the Pharmaceuticals and Medical Devices Agency in Japan, or the PMDA, the Therapeutic Goods Administration in Australia, or the TGA, and other comparable foreign regulatory authorities. To date, we have only conducted one clinical trial in Australia. Before we commence clinical testing in the United States, we will need to submit an Investigational New Drug, or IND, application to the FDA. Before obtaining regulatory approvals for the commercial sale of epetaborole and any future product candidates, we must demonstrate through preclinical and nonclinical studies and clinical trials that the product candidate is safe and effective for use in the target indication. Drug development is a long, expensive, and uncertain process, and delay or failure can occur at any stage during our nonclinical studies, clinical trials, or drug product manufacturing process. These delays could be caused by a variety of factors, including but not limited to, toxicity, safety, tolerability, efficacy, drug product availability, stability, and impurity issues related to drug product manufacturing. Failure to obtain regulatory approval for epetaborole and our future product candidates in the United States or other territories will prevent us from commercializing and marketing such product candidates. The success of epetaborole and our future product candidates will depend on several additional factors, including:

- approval of our future INDs;
- successful completion of preclinical and nonclinical studies and requisite clinical trials;
- performing preclinical studies and clinical trials in compliance with the FDA, EMA, PMDA, or any comparable regulatory authority requirements;
- receipt of marketing approvals from applicable regulatory authorities;
- the ability to manufacture sufficient quantity of product for development, clinical trials, or potential commercialization;
- obtaining marketing approvals with labeling for sufficiently broad patient populations and indications, without unduly restrictive distribution limitations or safety warnings, such as black box warnings or a Risk Evaluation and Mitigation Strategies, or REMS, program;
- obtaining and maintaining patent, trademark, and trade secret protection, and regulatory exclusivity for epetaborole and any future product candidates;
- making and retaining sufficient and reliable arrangements with third parties for manufacturing capabilities;
- launching commercial sales of products, if and when approved;
- acceptance of our therapies, if and when approved, by physicians, patients, and third-party payors;
- competing effectively with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement from third party payors;
- maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trademarks, trade secrets, and know-how;
- avoid and defend against third-party infringement, misappropriation or other violation of intellectual property claims; and

- maintaining a continued acceptable safety and tolerability profile of our drugs following approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize epetraborole or any of our future product candidates, which would harm our business.

We may not be successful in our efforts to build a pipeline of product candidates.

A key element of our strategy is to develop our AN2 drug discovery platform, build a pipeline of product candidates and progress these product candidates through clinical development for the treatment of serious infections (including different forms of NTM lung disease). We may not be able to develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, as a result of significant safety, tolerability, and other negative characteristics or limitations that may prevent successful marketing approval or limit market acceptance or reimbursements from third-party payors. If we do not successfully develop and commercialize epetraborole and/or any future product candidates, we will not be able to obtain product revenue in future periods, which could significantly harm our financial position and adversely affect the trading price of our common stock.

Success in preclinical or nonclinical studies or initial clinical trials may not be indicative of results in future clinical trials. To support our clinical development strategy for epetraborole, we are relying, in part, on clinical data from prior clinical trials conducted by Anacor and GlaxoSmithKline plc, or GSK, which were not conducted in patients with NTM. Differences with these prior clinical trials evaluating epetraborole will limit our use of prior clinical data for epetraborole and our ability to support our proposed clinical trial plan for epetraborole with the FDA.

Success in preclinical or nonclinical studies or initial clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the safety, tolerability, and efficacy of a product candidate. Epetraborole and our future product candidates may fail to show the desired safety, tolerability, and efficacy in clinical development despite positive results in preclinical studies or having successfully advanced through initial clinical trials. For instance, with respect to epetraborole, we cannot guarantee that the dose regimen used in our planned Phase 2/3 pivotal clinical trial will be safe, tolerable, or effective. We cannot guarantee that the rigorous pivotal study dose selection approach—including input from preclinical infection models, pharmacokinetic and pharmacodynamic modeling, plus pharmacokinetic and safety data from our ongoing Phase 1b dose-ranging study in healthy volunteers—will be validated in our planned Phase 2/3 pivotal clinical trial in patients with treatment-refractory NTM lung disease. The dosage regimen to be used in the planned single Phase 2/3 pivotal clinical trial will be the first evaluation of epetraborole in patients with NTM lung disease and specifically in treatment-refractory patients.

In addition, safety, tolerability, and pharmacokinetic observations of epetraborole, used as monotherapy, in previous clinical trials conducted by Anacor and GSK, including penetration into alveolar (lung) macrophages, may not be predictive of safety or efficacy results in our planned Phase 2/3 pivotal clinical trial. There are significant differences in the epetraborole Phase 1 clinical trial conducted by Anacor and the five Phase 1 clinical trials and two Phase 2 clinical trials conducted by GSK compared to the clinical trial design of our planned Phase 2/3 pivotal clinical trial. Other differences with these prior clinical trials, including differences in patient population, targeted indication, formulation and trial design, will limit our use of prior clinical data for epetraborole and our ability to support our proposed clinical trial plan for epetraborole with the FDA.

We plan to conduct a single Phase 2/3 pivotal clinical trial as the basis for submission to the FDA for product approval of epetraborole, and there can be no assurance that the single study will be sufficient for product approval.

The FDA generally requires two well-controlled Phase 3 clinical trials for product approval, unless the indication is a significant unmet medical need or otherwise produces sufficient clinical results in a single study to support the safety and efficacy of a product. However, in some cases the FDA has not required two Phase 3 clinical trials for product approval. For example, amikacin liposome inhalation suspension, marketed by Inmed Incorporated as Arikayce, was approved to treat NTM on the basis of a single Phase 3 clinical trial. We plan to conduct a single Phase 2/3 pivotal clinical trial to support approval of epetraborole in NTM, but there can be no assurance that the FDA will not require additional clinical trials for approval of epetraborole, including a separate Phase 2 clinical trial prior to the initiation of the planned Phase 3 clinical trial.

The FDA currently has no Guidance for Industry documents for the design of NTM clinical trials, and it can recommend study design element changes at any time, including, for example, of endpoints, eligibility criteria, or statistical analyses. For example, Arikayce, the only drug currently approved by the FDA for NTM lung disease caused by MAC, was approved based on the primary endpoint of culture conversion, whereas we will likely be required to demonstrate efficacy based on clinical endpoints. As a company, we have limited experience designing NTM clinical trials and have no experience conducting clinical trials in the United States and may be unable to design and execute a clinical trial to support regulatory approval. In addition, the design and results of a Phase 2/3 pivotal clinical trial may not be sufficient to determine whether the trial results will support approval of a product, since factors such as an insufficient dosage regimen or flaws in the design of a clinical trial may not become apparent until the clinical trial is in progress.

There is a high failure rate for drug and biologic products proceeding through clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in later-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials. For example, a Phase 2 clinical trial conducted by GSK to evaluate epetraborole in patients with complicated urinary tract infections was terminated early due to microbiological findings of resistance to epetraborole, which caused GSK to discontinue its epetraborole development program. In addition, data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit, or prevent regulatory approval. In addition, we may experience regulatory delays or rejections as a result of many factors, including changes in regulatory policy during the period of our product candidate development. Any such delays could negatively impact our business, financial condition, results of operations, and prospects.

If clinical trials of epetraborole or any future product candidate that we may advance to clinical trials fail to demonstrate safety, tolerability, and/or efficacy to the satisfaction of the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities, or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of epetraborole or any future product candidate.

We may not commercialize, market, promote, or sell any product candidate without obtaining marketing approval from the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities, and we may never receive such approvals. It is impossible to predict when or if epetraborole or any future product candidates will prove effective or safe in humans and will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of epetraborole or any future product candidates, we must complete preclinical and nonclinical development and conduct extensive clinical trials to demonstrate the safety, tolerability, and efficacy of such product candidates in humans. Clinical testing is expensive, difficult to design and implement, can

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take many years to complete, and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. Moreover, preclinical, nonclinical, and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical and nonclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

We may experience numerous unforeseen events prior to, during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize epetraborole or any of our future product candidates, including, but not limited to:

- the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities may disagree as to the design or implementation of our clinical trials, which may result in changes to our planned clinical trial design and potential target clinical outcomes, which could otherwise delay or otherwise negatively impact our ability to complete our clinical plans effectively;
- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may not reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- clinical trials for epetraborole or any of our future product candidates may produce negative or inconclusive results;
- we may be unable to successfully defeat bacterial resistance mechanisms in our planned epetraborole Phase 2/3 pivotal clinical trial, which may require early termination of the trial or abandonment of our epetraborole program;
- we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of epetraborole and any of our future product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, participants may drop out of these clinical trials at a higher rate than we anticipate, or we may fail to recruit suitable patients to participate in a trial;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- regulators may issue a clinical hold, or regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of epetraborole or any of our future product candidates may be greater than we anticipate;
- the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with whom we enter into agreements for clinical and commercial supplies;
- the supply or quality of epetraborole or any of our future product candidates or other materials necessary to conduct clinical trials of such product candidates may be insufficient or inadequate;
- epetraborole or our future product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators, or institutional review boards to suspend or terminate the clinical trials; and
- the approval policies or regulations of the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

If we are required to conduct additional clinical trials, for instance, if the regulatory authorities required us to conduct a separate Phase 2 clinical trial prior to the initiation of the planned Phase 3 clinical trial, rather than the current Phase 2/3 pivotal clinical trial as designed, or other testing of epetraborole or any of our future product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials or other testing of epetraborole or any of our future product candidates, or if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns observed in these trials or tests, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, such as black box warnings or a REMS program;
- be subject to additional post-marketing testing requirements; or
- be required to remove the product from the market after obtaining marketing approval.

Our product development costs may also increase if we experience delays in testing or marketing approvals and we may be required to obtain additional funds to complete clinical trials. We do not know whether any of our preclinical and nonclinical studies or clinical trials will begin as planned, will need to be restructured, or will be completed on schedule or at all. Significant preclinical and nonclinical study or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize epetraborole or our future product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our epetraborole or our future product candidates. In addition, many of the factors that cause, or lead to, delays of clinical trials may ultimately lead to the denial of regulatory approval of epetraborole or any of our future product candidates.

We cannot predict whether or when bacteria may develop resistance to epetraborole or any of our future product candidates, which could affect the revenue potential of our product candidates.

We are developing epetraborole to treat bacterial infections. The bacteria responsible for these infections evolve quickly and may readily transfer their resistance mechanisms within and between species. Prescription or use of epetraborole or our product candidates, if approved, may depend on the type and rate of resistance of the targeted bacteria. Although we do analyze the potential of epetraborole and any future product candidates to develop resistance and only select those that we believe have low resistance potential, we cannot predict whether or when bacterial resistance to epetraborole or future product candidates may develop should they obtain market approval and be broadly prescribed. For example, clinical resistance to epetraborole as a monotherapy was observed by GSK in its Phase 2 trial for the treatment of complicated urinary tract infection, and we cannot guarantee that clinical resistance will not be observed in any of our future clinical trials with epetraborole. The growth of drug-resistant infections in community settings or in countries with poor public health infrastructures, or the potential use of any product candidates outside of controlled hospital settings, could contribute to the rise of resistance.

Epetraborole or any of our future 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.

Epetraborole is not yet approved by the FDA, the EMA, the PMDA, the TGA, or any other regulatory agency and has not yet been tested extensively in patients. To date, epetraborole has been well-tolerated in clinical trials conducted in healthy volunteers at the doses that we are currently studying for use in patients. In previous development programs evaluating epetraborole, which largely used higher doses administered intravenously and orally, subjects and patients receiving epetraborole experienced drug-related side effects. For example, the most common drug-related adverse events observed in oral administration were gastrointestinal in nature. Additional adverse events may emerge in any subsequent clinical trials and there may be unforeseen serious adverse events or side effects that differ from those seen in studies completed to date. Often, it is not possible to determine whether or not a product candidate being studied caused side effects. 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 epetraborole and our future product candidates in larger, longer, and more extensive clinical programs, or as use of such product candidates becomes more widespread, if they receive regulatory approval, subjects will report illnesses, injuries, discomforts, and other adverse events that were not observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials. Many times, side effects are only detectable after investigational drugs are tested in large-scale, Phase 3 clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that epetraborole or any future product candidate has unexpected side effects or causes serious or life-threatening side effects, 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.

Epetraborole is being developed for use in the treatment of NTM lung disease as an add-on therapy to an optimized background regimen, which would include current standard of care drugs as outlined in the NTM treatment guidelines. Even if our product candidates demonstrate clinical efficacy, any unacceptable adverse side effects or toxicities, when administered in the presence of other pharmaceutical products, which can arise at any stage of development, may outweigh potential benefits. We may observe adverse or significant adverse events or drug-drug interactions in future preclinical studies or clinical trial candidates, which could result in the delay or termination of development, prevent regulatory approval, or limit market acceptance if ultimately approved.

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

Additionally, if epetraborole or any of our future product candidates receive marketing approval, regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication, or the adoption of a REMS program 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 any product candidates, several 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 or impose distribution or use restrictions;

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- we may be required to change the way a product candidate is administered or conduct additional clinical trials, including one or more post-marketing research studies, similar to Arikayce;
- we could be sued and held liable for harm caused to patients;
- we may be required to implement REMS, including the creation of a medication guide outlining the risks of such side effects for distribution 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 the affected product candidate, if approved, or could substantially increase commercialization costs and expenses, which could delay or prevent us from generating revenue from the sale of our product candidates and harm our business and results of operations.

If another party obtains orphan drug or pediatric exclusivity for a product that is essentially the same as epetraborole for the treatment of NTM lung disease, we may be precluded or delayed from commercializing epetraborole in that indication. This would materially adversely affect our business.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. The company that obtains the first marketing approval from the FDA for a designated orphan drug for a rare disease receives marketing exclusivity for use of that drug for the designated condition for a period of seven years. Similar laws exist in Europe and Japan. Pediatric exclusivity can provide an additional six months of market exclusivity in the United States. If a competitor obtains approval of the same drug for the same indication or disease before us, we would be blocked from obtaining approval for epetraborole for seven or more years, unless epetraborole can be shown to be clinically superior. In addition, more than one product may be approved by the FDA for the same orphan indication or disease, as long as the products are different drugs. As a result, if epetraborole is approved and receives orphan drug status, the FDA can still approve other drugs for use in treating the same indication or disease covered by epetraborole, which could create a more competitive market for us. The failure to successfully obtain orphan drug market exclusivity or pediatric drug market exclusivity would adversely affect our business.

If we are not successful in discovering, developing, and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.

Although a substantial amount of our effort will focus on the continued clinical testing and potential regulatory approval of epetraborole, an element of our strategy is to discover, develop, and commercialize a portfolio of product candidates to treat rare chronic lung infections including NTM lung disease. We are seeking to do so by utilizing our targeted-design AN2 drug discovery platform, which uses bacterial genomics and state-of-the-art molecular and dynamic models to design active new compounds that target validated mechanisms. We focus our clinical development on pathogens and patients with high, unmet medical needs to leverage the development and regulatory paths available for first-in-class or best-in-class anti-infectives. Research efforts to identify and develop product candidates require substantial technical, financial, and human resources, whether or not any product candidates are ultimately identified. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for many reasons, including the following:

- the research methodology used may not be successful in identifying potential product candidates;

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- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- a product candidate may not be accepted as safe, tolerable, and effective by patients, the medical community or third-party payors, if applicable; and
- the FDA, the EMA, the PMDA, the TGA, or other regulatory authorities may not approve or agree with the intended use of a new product candidate.

If we fail to develop and successfully commercialize epetaborole or our future product candidates, our business and future prospects may be harmed and our business will be more vulnerable to any problems that we encounter in developing and commercializing epetaborole.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate, continue, or complete clinical trials of epetaborole or any future product candidates that we develop if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials, as required by the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory authorities. We have limited experience enrolling patients in our clinical trials and cannot predict how successful we will be in enrolling patients in future clinical trials.

We may face delays and difficulties in enrollment because patients who qualify for our NTM clinical trials are considered rare (*i.e.*, the size of the targeted patient population is small) and are generally managed in the outpatient setting by specialized clinics and caregivers. Patients may also be reluctant to participate in a clinical trial with an investigational drug. In addition, some of our competitors may have ongoing clinical trials to treat the same indications as our product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors. Patient enrollment is also affected by other factors including:

- the severity of the disease under investigation;
- the proximity and availability of clinical trial sites for prospective patients;
- the eligibility criteria for participation in the clinical trial;
- the design of the clinical trial;
- the perceived risks and benefits of the product candidate under study;
- our ability to recruit clinical trial investigators with appropriate experience;
- the availability of drugs approved to treat the diseases under study;
- the patient referral practices of physicians;
- our ability to obtain and maintain patient consents;
- the ability to monitor patients adequately during and after treatment; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

Additionally, most patients with NTM lung disease have pre-existing co-morbidities, including underlying structural lung disease. Because of this, we expect difficulties in determining clinical responses in some patients in our planned Phase 2/3 pivotal clinical trial of epetaborole, and this could result in a failure to meet prespecified clinical trial endpoints. For example, even if epetaborole

has a beneficial effect on culture conversion, patient-reported symptom-based outcomes may not correlate with microbiological responses.

In addition, the COVID-19 pandemic may affect the timing of our planned clinical trials. Clinical trial activities, including patient enrollment and data collection, are dependent upon global clinical trial sites which have been and continue to be adversely affected by the COVID-19 pandemic. Patients may be unwilling to enroll in clinical trials due to fear of contracting COVID-19. In addition, after enrollment in our trials, patients may drop out of our trials, miss scheduled doses or follow-up visits or otherwise fail to follow trial protocols, due to site-related restrictions or patient quarantines after COVID-19 exposures or infections. If patients are unable to follow the trial protocols or if our trial results are otherwise disputed due to the effects of the COVID-19 pandemic or actions taken to mitigate its spread, the integrity of data from our trials may be compromised or not accepted by the FDA or other regulatory authorities, which would represent a significant setback for our product development.

Our inability to enroll a sufficient number of patients for clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in these clinical trials may result in increased development costs for our product candidates, which would reduce the capital we have available to support our current and future product candidates and may result in our need to raise additional capital earlier than planned and could cause the value of our common stock to decline and limit our ability to obtain additional financing.

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

Because we have limited financial and management resources, we focus on research programs and product candidates that we identify for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial drugs or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing, or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

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

From time to time, we may publish interim topline or preliminary data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or 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, interim and preliminary data should be viewed with caution until the final data are available. Differences between preliminary or interim data and final data could significantly harm our business prospects and may cause the trading price of our common stock to fluctuate significantly.

Risks Related to Our Dependence on Third Parties

We rely on single-sourced third parties to conduct the preclinical and nonclinical studies, clinical trials, and manufacture of our clinical trial material for epetaborole and our future product candidates, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such studies, trials, and manufacturing services or failing to comply with applicable regulatory requirements.

We have engaged contract research organizations, or CROs, to conduct our ongoing and planned preclinical and nonclinical studies, clinical trials and manufacture of our clinical trial material. We also expect to engage CROs for any of our other future product candidates that may progress to clinical development. We expect to rely on CROs, as well as other third parties, such as clinical data management organizations, medical institutions, and clinical investigators, to conduct those preclinical and nonclinical studies, clinical trials, and manufacture of our clinical trial material. Currently, we rely on single source third-party research institutions, laboratories, clinical research and manufacturing organizations for research and development. Agreements with such third parties might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, or fail to enter into alternative arrangements in a timely manner, our product development activities would be delayed.

Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with regulatory standards, commonly referred to as good clinical practices, or GCPs, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Similar regulatory requirements apply outside the United States, including the International Council for Harmonisation of Technical Requirements for the Registration of Pharmaceuticals for Human Use, or the ICH. We are also required to register certain ongoing clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so by us or third parties can result in FDA refusal to approve applications based on the clinical data, enforcement actions, adverse publicity, and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for epetaborole and our future product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize such product candidates.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the trial, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection by the FDA of any new drug application, or NDA, we submit. Any such delay or rejection could prevent us from commercializing epetaborole or any future product candidates.

We also expect to rely on other third parties to store and distribute product supplies for our clinical trials. Any performance failure or regulatory noncompliance on the part of our distributors could delay clinical development or marketing approval of epetaborole or any future product candidates or

commercialization of such product candidates, resulting in additional losses, and depriving us of potential product revenue.

Our reliance on single-sourced third parties to manufacture our product candidates increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent, or impair our development or commercialization efforts.

We do not own or operate manufacturing facilities for the production of clinical or commercial supplies of the product candidates that we are developing or evaluating, nor are we contemplating plans to do so. We have limited personnel with experience in drug manufacturing and lack the resources and the capabilities to manufacture any of our product candidates on a clinical or commercial scale. We currently rely on third parties, such as Esteve Química, S.A. and Catalent Pharma Solutions, for drug supply and drug product manufacture of our current product candidate, and our strategy is to continue to outsource all manufacturing of our product candidates and approved products, if any, to third parties.

In order to conduct clinical trials of our product candidates and prepare for commercialization, we will need to identify suitable manufacturers with the capabilities to manufacture our compounds in large quantities in a manner consistent with existing regulations. Our future plans include the identifying, qualifying, and contracting with a U.S. manufacturing site to manufacture epetaborole, assuming we have adequate financial resources to pursue contingency manufacturing plans. Our current and future third-party manufacturers may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities at any other time. If our manufacturers are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing, and clinical trials of that product candidate may be delayed or infeasible, and regulatory approval or commercial launch of that product candidate may be delayed or not obtained, which could significantly harm our business.

We do not currently have any agreements with third-party manufacturers for the long-term commercial supply of epetaborole or any of our future product candidates. In the future, we may be unable to enter into agreements with third-party manufacturers for commercial supplies of such product candidates or may be unable to do so on acceptable terms.

Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with current Good Manufacturing Practice, or cGMP, regulations or similar regulatory requirements outside the United States. 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 products, operating restrictions, and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates.

Epetraborole and our future products and product candidates may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

If the third parties that we engage to supply any materials or manufacture product for our preclinical and nonclinical studies and clinical trials should cease to continue to do so for any reason, we likely would experience delays in advancing these studies and trials while we identify and qualify replacement suppliers, and we may be unable to obtain replacement supplies on terms that are favorable to us. In addition, if we are not able to obtain adequate supplies of epetraborole or any future product candidates or the substances used to manufacture them, it will be more difficult for us to develop such product candidates and compete effectively.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to develop product candidates and commercialize any products that receive marketing approval on a timely and competitive basis.

Risks Related to the Commercialization of Epetraborole and Our Future Product Candidates

Even if epetraborole or any of our future product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community necessary for commercial success.

Even if we obtain approvals from the FDA, the EMA, the PMDA, the TGA, or other comparable regulatory agencies and are able to initiate commercialization of epetraborole or any future product candidates we develop, the product candidate may not achieve market acceptance among physicians, patients, and third-party payors and, ultimately, may not be commercially successful. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the safety, tolerability, efficacy, and ease of use of a once-a-day oral dose and other potential advantages compared to alternative treatments;
- the potential and perceived advantages and disadvantages of the product candidates, including cost and clinical benefit relative to alternative treatments;
- the convenience and ease of once-a-day oral administration compared to alternative treatments (e.g., inhaled drug through nebulizer);
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- acceptance by physicians, patients, payor-formularies, and treatment facilities and parties responsible for coverage and reimbursement of the product;
- the availability of coverage and adequate reimbursement by third-party payors, including government authorities;
- our ability to manufacture the product candidates in sufficient quantities and yields;
- the strength and effectiveness of marketing and distribution support;
- the prevalence and severity of any side effects;
- limitations or warnings, including distribution or use restrictions, contained in the product's approved labeling or an approved REMS;
- whether the product is designated under physician treatment guidelines as a first-line therapy or as a second- or third-line therapy for particular infections;
- whether the product is safe, tolerable, and efficacious when used in combination therapy with the current multi-drug standard of care regimen;
- the approval of other new products for the same indications;

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- the timing of market introduction of the approved product as well as competitive products;
- the emergence of bacterial resistance to the product; and
- the rate at which resistance to other drugs in the target infections grow.

If the market size of any product candidate that obtains regulatory approval is significantly smaller than we anticipate, it may not achieve market acceptance or commercial success. This could significantly and negatively impact our business, financial condition, and results of operations.

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

The development and commercialization of new drug products is highly competitive. We face competition from major multi-national pharmaceutical companies, biotechnology companies, specialty pharmaceutical companies, and generic drug companies with respect to epetraborole and other product candidates that we may develop and commercialize in the future. 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 NTM lung infections. Potential competitors also include academic institutions, government agencies, and other public and private research organizations. If our competitors obtain marketing approval from the FDA, the EMA, the PMA, the TGA, or other comparable regulatory authorities for their product candidates more rapidly than we do, it could result in our competitors establishing a strong market position before we are able to enter the market. Our competitors may also succeed in developing, acquiring, or licensing technologies and drug products that are more effective, more effectively marketed and sold, or less costly than epetraborole or any future product candidates that we may develop, which could render our product candidate non-competitive and obsolete.

Our initial product candidate, epetraborole, is being initially developed for treatment-refractory NTM lung disease caused by MAC complex isolates, and Insmed's Arikayce is the only currently approved therapy for patients with this condition. Other drugs used to treat these patients include generic drugs such as macrolides (clarithromycin and azithromycin), ethambutol, rifabutin, fluoroquinolones such as levofloxacin, bedaquiline, linezolid and clofazimine. There are a number of product candidates in clinical development by third parties that are intended to treat NTM lung disease. Some mid- to late-stage product candidates include SPR720 from Spero Therapeutics, Inc., RHB-204 from Redhill Biopharma Ltd., and omadacycline from Paratek Pharmaceuticals, Inc. In addition, there may also be unexpected or unknown competitors that we are not presently aware of.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical and nonclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do as an organization. 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 and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any product candidates that we may develop. Our competitors also may obtain approval from the FDA, the EMA, the PMA, the TGA, or other comparable regulatory agencies for their product candidates more rapidly than we may obtain approval for ours, which could result in product approval delays if a competitor obtains market exclusivity from the FDA, the EMA, the

PMA, the TGA, or any comparable regulatory agencies or our competitors establish a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic drugs. Additional drugs may become available on a generic basis over the coming years. If epetraborole or any future product candidates achieve marketing approval, we expect that they will be priced at a significant premium over competitive generic drugs.

If we are unable to establish sales, marketing, and distribution capabilities for epetraborole or our future product candidates, or enter into sales, marketing, and distribution agreements with third parties, we may not be successful in commercializing our product candidates, if and when they are approved.

We do not have a sales or marketing infrastructure and have limited experience in the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any product candidate for which we may obtain marketing approval, we will need to establish a sales and marketing organization or enter into collaboration, distribution, and other marketing arrangements with one or more third parties to commercialize such product candidate. In the United States, we intend to build a commercial organization to target areas with the greatest incidence NTM lung infections and recruit experienced sales, marketing, and distribution professionals. The development of sales, marketing, and distribution capabilities will require substantial resources, will be time-consuming, and could delay any product launch. We may decide to work with regional specialty pharmacies, distributors, and/or multi-national pharmaceutical companies to leverage their commercialization capabilities to commercialize any product candidate for which we may obtain regulatory approval outside of the United States.

If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and distribution capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization costs. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. In addition, we may not be able to hire a sales force in the United States that is sufficient in size or has adequate expertise to target the areas that we intend to target. If we are unable to establish a sales force and marketing and distribution capabilities, our operating results may be adversely affected.

Factors that may inhibit our efforts to commercialize our drugs on our own include:

- our inability to recruit, train, and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage compared to companies with more extensive product lines;
- unforeseen costs and expenses associated with creating an independent sales and marketing organization; and
- unforeseen costs and limitations with regard to setting up a distribution network.

If we are unable to establish our own sales, marketing, and distribution capabilities in the United States and other jurisdictions in which epetraborole or any future product candidates are approved and, instead, enter into arrangements with third parties to perform these services, our revenues and profitability, if any, are likely to be lower than if we were to sell, market, and distribute any product candidates that we develop ourselves. We may not be successful in entering into arrangements with third parties to sell, market, and distribute our product candidates or may be unable to do so on terms that are favorable to us. We likely will have limited control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we

do not establish sales, marketing, and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing any product candidates.

Coverage and adequate reimbursement may not be available for epetraborole 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 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 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 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 list of covered drugs, or formulary, it will be placed. The position on a payor's 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, and providers are unlikely to prescribe our drugs, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our drugs and their administration.

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 epetraborole and any future product candidates that we develop.

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

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

- reduced resources of our management to pursue our business strategy;
- decreased demand for any product candidates or products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- product recalls, withdrawals, or labeling, marketing, or promotional restrictions;
- significant costs to defend the resulting litigation;
- substantial monetary awards paid to clinical trial participants or patients;

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- loss of revenue;
- the inability to commercialize any drugs that we may develop; and
- a decline in our share price.

We currently hold \$5.0 million in global product liability insurance coverage with a per incident limit of \$5.0 million and an AUD \$10.0 million product liability insurance coverage for the Phase 1b dose-ranging study in Australia with a per incident limit of AUD \$10.0 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of any product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise, if at all. Our product liability insurance policy contains various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with current or future collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

There are a variety of risks associated with marketing our epetraborole or any future product candidates internationally, which could affect our business.

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

- differing regulatory requirements and reimbursement landscapes in foreign countries;
- the potential for so-called parallel importing, which is what happens when a local seller, faced with high or higher local prices, opts to import goods from a foreign market with low or lower prices rather than buying them locally;
- unexpected changes in tariffs, trade barriers, price and exchange controls, and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations may compromise our ability to achieve or maintain profitability.

Risks Related to Our Business, Industry, and Managing Our Growth

We operate with a small team and our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.

We currently have limited personnel: as of August 31, 2021, we had 16 full-time employees. We are highly dependent on the management, research and development, clinical, financial, and business development expertise of Eric Easom, M.B.A, M.Eng., our co-founder, president, and chief executive officer, Paul Eckburg, M.D., our chief medical officer, Sanjay Chanda, Ph.D., our chief development officer, Lucy Day, our chief financial officer, Kevin Krause, M.B.A., our chief strategy officer, George H. Talbot, M.D., FACP, FIDSA, our co-founder and senior clinical advisor, and Michael R.K. (Dickon) Alley, Ph.D., our co-founder and head of biology, as well as the other members of our research, development, and business teams. Each of them may currently terminate their employment with us at any time and will continue to be able to do so after the completion of this offering. We do not maintain “key person” insurance for any of our executives or employees.

Our limited personnel and resources may result in greater workloads for our employees compared to those at companies with which we compete for personnel, which may lead to higher levels of employee dissatisfaction and turnover. Recruiting and retaining qualified research, development, and business personnel and, if we progress the development of any of epetaborole or any future product candidates, commercialization, manufacturing, and sales and marketing personnel, will be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize our product candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain, or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of research and development personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high-quality personnel, our ability to pursue our growth strategy will be limited.

Our business could be adversely affected by the effects of health epidemics, including the ongoing COVID-19 pandemic.

Our business could be adversely affected by health epidemics, including the COVID-19 pandemic, in regions where we or third parties on which we rely have manufacturing facilities, concentrations of potential clinical trial sites or other business operations. For example, as a result of the COVID-19 pandemic, the State of California, where our operations are located, has issued orders limiting activities to varying levels, including at the most restrictive level, an order for all residents to remain at home, except for the performance of essential activities, which include biomedical research. We have implemented policies that enable our employees to work remotely, and such policies may continue for an indefinite period. We have also implemented various safety protocols for all on-site personnel, including the requirements to wear masks, suspend all non-essential travel for our employees and maintain social distance. We continue to evaluate our protocols and practices as the global response

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to the COVID-19 pandemic continues to evolve. There can be no assurance that we will be able to avoid part or all of any impact from the spread of COVID-19 or its consequences.

In addition, our current preclinical and nonclinical studies and current and future clinical trial plans may be affected by the COVID-19 pandemic. Site initiation and patient enrollment may be delayed due to prioritization of hospital resources toward the COVID-19 pandemic, which may delay enrollment in our future global clinical trials, and some patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Further, some of our suppliers may experience disruption to their respective supply chain due to the effects of health epidemics, including the COVID-19 pandemic, which could delay, prevent, or impair our development or commercialization efforts.

The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. Several measures are currently being implemented by the United States and other governments to address the current COVID-19 pandemic and its economic impacts. At this time, it is impossible to predict the impact of these measures and whether or not they will have unforeseen negative consequences for our business. We do not yet know the full extent of potential delays or impacts on our business, our planned preclinical studies or clinical trials, healthcare systems or the global economy as a whole; nor do we know when and how such regulations may be eased. The foregoing and other continued disruptions to our business as a result of COVID-19 could result in an adverse effect on our business, results of operations, financial condition and cash flows. Furthermore, the COVID-19 pandemic could heighten the risks in certain of the other risk factors described herein.

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

Prior to the completion of this offering, we have been a private company with limited accounting personnel to adequately execute our accounting processes and other supervisory resources with which to address our internal control over financial reporting. In connection with the preparation of our financial statements, we identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses are as follows:

- We did not design and maintain an effective control environment commensurate with our financial reporting requirements. Specifically, we lacked a sufficient complement of resources with (i) an appropriate level of accounting knowledge, experience and training to appropriately analyze, record and disclose accounting matters timely and accurately, and (ii) an appropriate level of knowledge and experience to establish effective processes and controls. Additionally, the lack of a sufficient number of professionals resulted in an inability to consistently establish appropriate authorities and responsibilities in pursuit of our financial reporting objectives, as demonstrated by, among other things, insufficient segregation of duties in our finance and accounting functions. This material weakness contributed to additional material weaknesses.
- We did not design and maintain effective controls related to the period-end financial reporting process, including designing and maintaining formal accounting policies, procedures and controls to achieve complete, accurate and timely financial accounting, reporting and disclosures. Additionally, we did not design and maintain controls over the preparation and review of account reconciliations and journal entries, including maintaining appropriate segregation of duties.

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- We did not design and maintain effective controls related to the accounting for certain non-routine or complex transactions, including the proper application of U.S. GAAP to such transactions.

These material weaknesses resulted in adjustments to the redeemable convertible preferred stock, tranche liability and accrued expenses balances, which were recorded prior to the issuance of the financial statements as of and for the year ended December 31, 2019 and 2020. Additionally, these material weaknesses could result in a misstatement of substantially all of our accounts or disclosures that would result in a material misstatement to the annual or interim financial statements that would not be prevented or detected.

- We did not design and maintain effective controls over information technology (IT) general controls for information systems that are relevant to the preparation of our financial statements. Specifically, we did not design and maintain (i) program change management controls to ensure that information technology program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized and implemented appropriately, (ii) user access controls to ensure appropriate segregation of duties and that adequately restrict user and privileged access to financial applications, programs, and data to appropriate Company personnel, (iii) computer operations controls to ensure that critical batch jobs are monitored, and data backups are authorized and monitored, and (iv) testing and approval controls for program development to ensure that new software development is aligned with business and IT requirements.

These IT deficiencies did not result in adjustments to the financial statements. However, the IT deficiencies, when aggregated, could impact maintaining effective segregation of duties, as well as the effectiveness of IT-dependent controls (such as automated controls that address the risk of material misstatement to one or more assertions, along with the IT controls and underlying data that support the effectiveness of system-generated data and reports) that could result in misstatements potentially impacting all financial statement accounts and disclosures that would not be prevented or detected. Accordingly, management has determined the IT deficiencies in the aggregate constitute a material weakness.

To address our material weaknesses, we are in the process of implementing measures designed to improve our internal control over financial reporting and remediate the control deficiencies that led to the material weaknesses. These measures include (i) the ongoing hiring of additional accounting personnel; (ii), initiating design and implementation of our financial control environment, including the establishment of formal accounting policies and procedures, financial reporting controls and controls to account for and disclose complex transactions; and (iii) initiating and designing IT controls to insure appropriate and restricted access to our accounting applications, programs and data.

We are working to remediate the material weaknesses as efficiently and effectively as possible and expect full remediation could potentially go beyond December 31, 2022. We cannot assure you that there will not be future 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 fail to remediate our identified material weaknesses, or identify additional material weaknesses, in our internal control over financial reporting 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 The Nasdaq Global Market, 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 expect to expand our research, development, and business capabilities and potentially implement sales, marketing, and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As the clinical development of our product candidates progresses, we also expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of research, drug development, regulatory affairs and, if epeborole or any future product candidate receives marketing approval, sales, marketing, and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational, and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and research and development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

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 restricted 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 other 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. 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 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 or our third-party vendors' or business partners' information technology systems or other similar data security incidents could adversely affect our business operations and result in the loss, misappropriation, and 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 ongoing, 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. We cannot ensure that our data

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protection efforts and our investment in information technology, or the efforts or investments of CROs, consultants or other third parties with which we work, will prevent breakdowns or breaches in our or their systems or other cybersecurity incidents that cause loss, destruction, unavailability, alteration, dissemination of, or damage, or unauthorized access to, our data, including personal data, assets, and other data processed or maintained on our behalf, that could have a material adverse effect upon our reputation, business, operations, or financial condition.

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. 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 personal information regarding our patients or employees, could disrupt our business, harm our reputation, compel us to comply with applicable federal and 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 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, 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. 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. Any of the foregoing could have a material adverse effect on our reputation, business, operations, or financial condition.

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

From time to time, we may evaluate various acquisitions and strategic collaborations, including licensing or acquiring complementary drug products, intellectual property rights, technologies, or businesses, as deemed appropriate to carry out our business plan. Any potential acquisition or strategic collaboration may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- assimilation of operations, intellectual property, and drug products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing drug programs and initiatives in pursuing such a strategic partnership, merger, or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing drugs or drug candidates and regulatory approvals; and

- our inability to generate revenue from acquired technology and/or drugs sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain patent and other intellectual property protection for our technology, or for epetraborole or our future product candidates, or if the scope of the patent and other intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.

We in-license patents and do not own any patents or patent applications for epetraborole, our lead drug compound, and 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 epetraborole and any of our future product candidates. We seek to protect our proprietary position by in-licensing intellectual property relating to our product candidates including patent applications in the United States and abroad related to our technology and product candidates that are important to our business. If we or our licensors do not adequately protect the intellectual property we in-license or may own in the future, competitors may be able to use our technologies and erode or negate any competitive advantage that we may have, which could harm our business and ability to achieve profitability. To protect our proprietary positions, we and our licensors file patent applications in the United States and abroad related to our novel technologies and product candidates that are important to our business. The patent application and prosecution process is expensive and time-consuming. We and our current licensors and licensees, or any future licensors and licensees may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We or our current licensors and licensees, or any future licensors or licensees may also fail to identify patentable aspects of our research and development before it is too late to obtain patent protection, or fail to continue to prosecute patents relating to our product candidates. Therefore, these and any of our in-licensed patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. It is possible that defects of form in the preparation or filing of our licensors' patents or patent applications may exist, or may arise in the future, such as with respect to proper priority claims, inventorship, claim scope, or patent term adjustments. If our current licensors and licensees, or any future licensors or licensees, are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised and we might not be able to prevent third parties from making, using, and selling competing products. We cannot predict whether the patent applications we and our licensors or licensees are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection from competitors. If there are material defects in the form or preparation of our or our licensors' patents or patent applications, such patents or applications may be invalid and unenforceable. Moreover, our competitors may independently develop equivalent knowledge, methods, and know-how and we may not be able to prevent such competitors from commercializing such equivalent knowledge, methods, and know-how. Any of these outcomes could impair our ability to prevent competition from third parties and could have a material adverse effect on our business, financial condition, results of operations, or prospects.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain and has been the subject of much litigation in recent years. 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. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. No consistent policy regarding the breadth of claims allowed in biotechnology and pharmaceutical patents has emerged to date in the

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United States or in many foreign jurisdictions. In addition, the determination of patent rights with respect to pharmaceutical compounds and technologies commonly involves complex legal and factual questions, which has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Furthermore, recent changes in patent laws in the United States, including the America Invents Act of 2011, and future changes in patent laws in or outside the United States may affect the scope, strength, and enforceability of our patent rights or the nature of proceedings that may be brought by us related to our patent rights.

We may not be aware of all third-party intellectual property rights potentially relating to epetaborole or our future product candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that our licensors were the first to make the inventions claimed in patents or pending patent applications that we in-license or may own in the future, or that our licensors were the first to file for patent protection of such inventions. Similarly, should we own any patents or patent applications in the future, we may not be certain that we were the first to file for patent protection for the inventions claimed in such patents or patent applications. As a result, the issuance, scope, validity, and commercial value of our patent rights cannot be predicted with any certainty. Moreover, we or our licensors may be subject to a third-party pre-issuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, reexamination, *inter partes* review, or interference proceedings, in the United States or elsewhere, 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 product candidates, and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize product candidates without infringing third-party patent rights.

Our licensors' pending and future patent applications and patent applications we may own in the future may not result in patents being issued that protect our technology or product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Even if our or our licensors' patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection against competing products or processes sufficient to achieve our business objectives, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our in-licensed patents or any patents we may own in the future by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may seek to market generic versions of any approved products by submitting abbreviated NDAs to the FDA in which they claim that patents licensed by us or may be owned by us in the future are invalid, unenforceable, and/or not infringed. Alternatively, our competitors may seek approval to market their own products similar to or otherwise competitive with our product candidates. In these circumstances, we may need to defend and/or assert our in-licensed or owned patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court, or other agency with jurisdiction may find our in-licensed or owned patents invalid and/or unenforceable.

The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our in-licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate 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 product candidates, or limit the duration of the patent protection of our technology and product candidates. In addition, 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. Any impairment of our intellectual property rights, or our failure to protect our intellectual property rights adequately, could give third parties access to our technology and product candidates and could materially and adversely impact our business, financial condition, results of operations, and prospects.

Our rights to develop and commercialize our technology, epetaborole, and our other future product candidates are subject, in large part, to the terms and conditions of licenses granted to us by others and if we fail to comply with our obligations in the agreements under which we in-license or acquire development or commercialization rights to products, technology, or data from third parties, we could lose such rights that are important to our business.

We are heavily reliant upon licenses to certain patent rights and other intellectual property that are important or necessary to the development of epetaborole or our future product candidates. For example, we depend on a license agreement from Anacor, a biopharmaceutical company that originally developed epetaborole and is currently a wholly-owned subsidiary of Pfizer Inc. Additionally, we have licensed out our rights under the Anacor agreement in China to Bii Biosciences and a breach by Bii Biosciences of the terms of our agreement with Anacor could potentially cause a termination of our license agreement with Anacor and result in us losing our license to epetaborole.

Anacor has relied upon, and any future licensors may have relied upon, third party companies, consultants or collaborators, or on funds from third parties such that our licensors are not the sole and exclusive owners of the patents we in-licensed. We have sublicensed certain patents from Anacor that are owned, maintained and prosecuted by GSK. If third party companies such as GSK fail to prosecute, maintain, enforce, and defend such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated, and our right to develop and commercialize epetaborole or our other future product candidates that are the subject of such licensed rights could be adversely affected. Further, we rely upon Anacor's compliance with its license agreement with GSK to maintain our sublicense to such patents owned by GSK, and any termination of Anacor's license agreement with GSK could result in us losing our license to epetaborole.

Our license agreement with Anacor, and other intellectual property-related agreements we may enter into in the future may impose diligence and other obligations, including payment of milestones and royalties. For example, our license agreement from Anacor requires us to satisfy diligence requirements, including using commercially reasonable efforts to develop and commercialize products. If we fail to comply with our obligations to Anacor or any future licensors, those counterparties may have the right to terminate the license agreements, in which event we might not be able to develop, manufacture, or market any product candidate licensed under the agreements, which could materially adversely affect the value of the product candidate being developed under any such agreement and further involve termination of our rights to important intellectual property or technology.

In spite of our efforts, Anacor or any future licensors might conclude that we are in material breach of obligations under our license agreements and may therefore have the right to terminate the license agreements, thereby removing our ability to develop and commercialize product candidates and technology covered by such license agreements. If such in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, our competitors would have the freedom to seek regulatory approval of, and to market, products identical to our product candidates and the licensors to such in-licenses could prevent us from commercializing product candidates that rely upon the patents or other intellectual property rights which were the subject matter of such terminated agreements. In addition, we may seek to obtain additional licenses from our licensors and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensors, including by agreeing to terms that could enable third parties (potentially including our competitors) to receive licenses to a portion of the intellectual property that is subject to our existing

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licenses. Any of these events could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Under our license agreement with Anacor, and any future license agreements, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

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

We may not be successful in obtaining necessary rights to any product candidates we may develop through acquisitions and in-licenses.

We currently have rights to intellectual property, through licenses from third parties, to identify and develop product candidates. We may find it necessary or prudent to obtain licenses from such third-party intellectual property holders in order to avoid infringing these third-party patents. For example, many pharmaceutical companies, biotechnology companies, and academic institutions compete with us and may be filing patent applications potentially relevant to our business. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may become involved in lawsuits to protect or enforce our owned or in-licensed patents or other intellectual property, which could be expensive, time-consuming, and unsuccessful.

Competitors or other third parties may infringe, misappropriate or otherwise violate our in-licensed issued patents or our other intellectual property we may own. To counter such infringement,

misappropriation, or other unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against third parties could provoke these parties to assert counterclaims against us alleging that we infringe, misappropriate or otherwise violate their patents, trademarks, copyrights, or other intellectual property. In addition, our in-licensed patents may become involved in inventorship or priority disputes. Third parties may raise challenges to the validity of certain of our in-licensed patent claims and may in the future raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. For example, we may be subject to a third-party pre-issuance submission of prior art to the USPTO, or become involved in derivation, revocation, reexamination, post-grant review, or PGR, *inter partes* review, or IPR, interference proceedings, and equivalent proceedings in foreign jurisdictions, such as opposition proceedings challenging any patents that we may own or in-license. Such submissions may also be made prior to a patent's issuance, precluding the granting of a patent based on one of our owned or licensed pending patent applications. A third party may also claim that our potential future owned patents or licensed patent rights are invalid or unenforceable in a litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. An adverse determination in any such submission, proceeding, or litigation could reduce the scope of, invalidate, or render unenforceable, our potential future owned patents or licensed patent rights, allow third parties to commercialize epetraborole or our other future product candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In a patent infringement proceeding, there is a risk that a court will decide that a patent we in-license 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 are 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 in-licensed patents do not cover the invention. An adverse outcome in a litigation or proceeding involving our in-licensed patents could limit our ability to assert our in-licensed 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. Similarly, in the future, we expect to rely on trademarks to distinguish epetraborole and any of our other future product candidates that are approved for marketing, and 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.

In any infringement litigation, any award of monetary damages we receive may not be commercially valuable. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Moreover, there can be no assurance that we will have sufficient financial or other resources to adequately file and pursue such infringement claims, which typically last for years before they are concluded. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Even if we ultimately prevail in such claims, 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. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating, or successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a negative impact on our ability to compete in the marketplace, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Third parties may initiate legal proceedings alleging that we are infringing misappropriating, or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could significantly harm our business.

Our commercial success depends, in part, on our ability to develop, manufacture, market, and sell epetaborole or other future product candidates and use our proprietary chemistry technology without infringing, misappropriating or otherwise violating the intellectual property of third parties. Numerous third-party U.S. and non-U.S. issued patents exist in the area of antibacterial treatment, including compounds, formulations, treatment methods, and synthetic processes that may be applied towards the synthesis of antibiotics. If any such patents of third parties cover our product candidates or technologies, we may not be free to manufacture or market our product candidates as planned.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation, or other adversarial proceedings regarding intellectual property rights with respect to our technology or product candidates, including interference proceedings before the USPTO. Third parties may assert claims against us based on existing or future intellectual property rights. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance.

If we are found to have infringed, misappropriated, or otherwise violated any third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing, or commercializing epetaborole or other future product candidates. Alternatively, we may be required to obtain a license from such third party in order to use technology and continue developing, manufacturing, or marketing product candidates which infringes or violates such third party's intellectual property. However, we may not be able to obtain any such required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We may also be required to pay substantial ongoing royalty or license payments, fees, or comply with other unfavorable terms. 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 commercializing epetaborole or other future product candidates or force us to cease some of our business operations. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative effect on our business. Even if we were to prevail in such a dispute, any litigation regarding our intellectual property could be costly and time-consuming and divert the attention of our management and key personnel from our business operations. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. During the court of litigation, there could be public announcements or 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 a substantial adverse effect on the price of our Class A common stock. Negative publicity related to a decision by us to initiate such enforcement actions against a customer or former customer, regardless of its accuracy, may adversely impact our other customer relationships or prospective customer relationships, harm our brand and business and could cause the market price of our Class A common stock to decline. Any of the foregoing arising from uncertainty in legal proceedings could materially and adversely impact our business, financial condition, results of operations, and prospects.

We may be subject to claims by third parties asserting that we or our employees, consultants, and advisors have misappropriated their intellectual property or claiming ownership of what we regard as our own intellectual property.

Many of our employees, consultants, and advisors 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 third parties in their work for us, we may be subject to claims that we or such employees, consultants, and advisors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's former employer. We may also in the future be subject to claims that we have caused an employee to breach the terms of his or her non-competition or non-solicitation agreement. Litigation may be necessary to defend against these potential claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, such employees and contractors may breach the agreement and claim the developed intellectual property as their own. Further, we may be unsuccessful in executing such agreements 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 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.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A court could prohibit us from using technologies or features that are essential to epetraborole or other future product candidates if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and could be a distraction to management. In addition, any litigation or threat thereof may adversely affect our ability to hire employees or contract with independent service providers. Moreover, a loss of key personnel or their work product could hamper or prevent our ability to commercialize our product candidates. Any of the foregoing could have a material adverse impact on our business, financial condition, results of operations, and prospects.

Any trademarks we may obtain may be infringed or successfully challenged, resulting in harm to our business.

We expect to rely on trademarks as one means to distinguish any of our product candidates that are approved for marketing from the products of our competitors. We have not yet selected trademarks for our product candidates and have not yet begun the process of applying to register trademarks for our product candidates. Once we select trademarks and apply to register them, our trademark applications may not be approved. Third parties who have prior rights to our trademarks or third parties who have prior rights to similar trademarks may oppose our trademark applications, or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our product candidates, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. At times, competitors may adopt trade names or trademarks similar to ours, thereby diluting or impeding our ability to build brand identity and possibly leading to market confusion. Our competitors may infringe our trademarks and we may not have adequate resources to enforce our trademarks and may not be able to prevent such third parties from using and marketing any such trademarks.

In addition, any proprietary name we propose to use with epetraborole or any future product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. If we are unable to establish name recognition based on our trademarks, we

may not be able to compete effectively and our business, financial condition, results of operations, and prospects may be adversely affected.

If we are unable to protect the confidentiality of our proprietary information, know-how, and trade secrets, the value of our epetaborole or other future product candidates could be adversely affected and our business and competitive position would be harmed.

In addition to seeking patent protection for epetaborole or other future product candidates, we also rely on trade secrets, including unpatented know-how, technology, and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors, and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. However, these agreements may be inadequate to protect our proprietary and intellectual property rights. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets. In addition, we may not be able to obtain adequate remedies for any such breaches. Although we use reasonable efforts to protect this proprietary information and technology, we also cannot guarantee that we have entered into such agreements with each party that may have or have had access to our confidential information, know-how, trade secrets, or other proprietary information or each individual who has developed intellectual property on our behalf. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, distracting to management, and time-consuming, and the outcome is unpredictable and varied depending on the jurisdiction. In addition, some courts inside and outside the United States, in countries in which we operate or intend to operate, are less willing, or unwilling, to protect trade secrets, know-how, and other proprietary information. Any claims or litigation could cause us to incur significant expenses. Some third parties may be able to sustain the costs of complex litigation more effectively than we can because they have substantially greater resources.

Our employees, consultants, and other parties may unintentionally or willfully disclose our information or technology to competitors and there can be no assurance that the legal protections and precaution taken by us will be adequate to prevent misappropriation of our technology or that competitors will not independently develop technologies equivalent or superior to ours. Trade secrets and know-how can be difficult to protect. Our competitors or other third parties may independently develop knowledge, methods and know-how equivalent to our trade secrets. Additionally, competitors could purchase our product candidates and replicate some or all of the competitive advantages we derive from our development efforts for technologies on which we do not have patent protection. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

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

Given the amount of time required for the development, testing, and regulatory review of new product candidates, patents we license or may own in the future protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to our product candidates. Depending upon the timing, duration, and specifics of any FDA

marketing approval of any of our product candidates, one or more of our in-licensed U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed.

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 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 or in-licensed patents and applications. In certain circumstances, we rely on our licensing partners to pay these fees due to U.S. and non-U.S. patent agencies. The USPTO and various non-U.S. government agencies require compliance with several procedural, documentary, fee payment, and other similar provisions during the patent application process. 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 some 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 a partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market with similar or identical products or technology, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

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

Filing, prosecuting, and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States could be less extensive than those in the United States. In some cases, we or our licensors may not be able to obtain patent protection for certain licensed technology outside the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States, even in jurisdictions where we or our licensors do pursue patent protection. Consequently, we may not be able to prevent third parties from practicing our in-licensed inventions in all countries outside the United States, even in jurisdictions where our licensors do pursue patent protection or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

Competitors may use our technologies in jurisdictions where our licensors have not pursued and obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with epetaborole, our future product candidates, and our

preclinical programs. Our in-licensed patents or other intellectual property rights may not be effective or sufficient to prevent them from 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 protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our in-licensed patents, if pursued and obtained, or the marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our in-licensed patents at risk of being invalidated or interpreted narrowly and our in-licensed patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

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

Risks Related to Regulatory Approval of Epetraborole and Our Future Product Candidates and Other Legal Compliance Matters

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize epetraborole or our future product candidates, and our ability to generate revenue will be materially impaired.

Epetraborole and our future product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable foreign regulatory authorities, with regulations differing from country to country. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We currently do not have any products approved for sale in any jurisdiction. We as a company only have limited experience in filing and supporting the applications necessary to gain marketing approvals and may rely on third-party contract research organizations to assist us in this process.

The time required to obtain approval, if any, 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, government budget, and funding levels and statutory, regulatory, and policy changes. Average review times at the FDA have fluctuated in recent years, and disruptions at the FDA and other agencies may slow the time necessary for new drugs to be reviewed and/or approved. 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, including the FDA, have had to furlough nonessential employees and stop routine activities. Events like this could significantly impact the ability of the FDA to timely review and process our regulatory submissions.

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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. For instance, recent changes to leadership, enhanced focus on countermeasures related to the COVID-19 pandemic, and the reorganization and rededication of critical resources, at the FDA and within similar governmental health authorities across the world, may impact the ability of new products and services from being developed or commercialized in a timely manner. Regulations and requirements vary among jurisdictions, including in Europe and Japan. We have not obtained regulatory approval for any product candidate, and it is possible that epetraborole and any product candidates we may seek to develop in the future will never obtain regulatory approval. We are not permitted to market any product candidate in the United States until we receive regulatory approval of an NDA from the FDA.

In order to obtain approval to commercialize a product candidate in the United States or abroad, we or our collaborators must demonstrate to the satisfaction of the FDA or foreign regulatory agencies, that such product candidates are safe and effective for their intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe that the nonclinical or clinical data for a product candidate is 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 nonclinical studies or clinical trials for product candidates either prior to or post-approval, and it may otherwise object to elements of our clinical development program.

We have not submitted a marketing application for epetraborole or any other product candidates in any country or region. Any marketing application must include extensive preclinical, nonclinical, and clinical data and supporting information to establish the product candidate's safety and efficacy for each desired indication. The marketing application(s) must also include significant information regarding the chemistry, manufacturing, and controls for the product candidate. Obtaining marketing authorization is a lengthy, expensive, and uncertain process. The FDA, EMA, PMDA, and other comparable health authorities have substantial discretion in the review and approval process and may refuse to accept for filing any application or may decide that our data are insufficient for approval and require additional nonclinical, clinical, or other studies. Foreign regulatory authorities have differing requirements for approval of drugs with which we must comply prior to marketing. There can be no assurance that any foreign regulatory authorities will accept FDA approval as sufficient to support approval in that country. Obtaining marketing approval for marketing of a product candidate in one country does not ensure that we will be able to obtain marketing approval in other countries, but the failure to obtain marketing approval in one jurisdiction could negatively affect our ability to obtain marketing approval in other jurisdictions. The FDA or any foreign regulatory bodies can delay, limit or deny approval of epetraborole or other future product candidates or require us to conduct additional nonclinical or clinical testing or abandon a program for many reasons, including:

- disagreement with the design or implementation of our clinical trials;
- negative or ambiguous results from our clinical trials or results that may not meet the level of statistical significance required by the FDA or comparable foreign regulatory agencies for approval (for example, otherwise positive epetraborole results may be called into question if patient reported outcomes introduce ambiguity due to factors such as co-morbidities and other underlying patient issues);
- serious and unexpected drug-related side effects experienced by participants in our clinical trials or by individuals using drugs similar to our product candidates;
- our inability to demonstrate to the satisfaction of the FDA or the applicable foreign regulatory body that our product candidates are safe and effective for the proposed indication;
- disagreement with the interpretation of data from nonclinical studies or clinical trials;
- our inability to demonstrate the clinical and other benefits of our product candidates outweigh any safety or other perceived risks;

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- requirements for additional nonclinical studies or clinical trials;
- disagreement regarding the formulation, labeling, and/or the specifications we propose for our product candidates; or
- changes in a policies, requirements, or regulations rendering our clinical data insufficient for approval.

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

Even if we eventually receive approval of an NDA or foreign marketing application for our product candidates, the FDA, or the applicable foreign regulatory agency may grant approval contingent on the performance of costly additional clinical trials, often referred to as Phase 4 clinical trials, and the FDA may require the implementation of a REMS, which may be required to ensure safe use of the drug after approval. The FDA or the applicable foreign regulatory agency also may approve a product candidate for a more limited indication or patient population than we originally requested, and the FDA or applicable foreign regulatory agency may not approve the labeling that we believe is necessary or desirable for the successful commercialization of a product candidate. Any delay in obtaining, or inability to obtain, applicable regulatory approval would delay or prevent commercialization of that product candidate and would materially adversely impact our business and prospects.

Future legislation, and/or regulations and policies adopted by the FDA, the EMA, or comparable regulatory authorities, may increase the time and cost required for us to conduct and complete clinical trials of epetraborole or other future product candidates.

The FDA has established regulations to govern the drug development and approval process, as have foreign regulatory authorities. The policies of the FDA and other regulatory authorities may change and additional laws may be enacted or government regulations may be promulgated that could prevent, limit, delay, or alternatively accelerate regulatory review of epetraborole or other future product candidates. Further, disruptions at the FDA and other agencies may prolong the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical 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.

We may seek orphan drug designation for epetraborole and/or our product future candidates. We may not be able to obtain or maintain orphan drug designations for any product candidates, and we may be unable to take advantage of the benefits associated with orphan drug designation, including the potential for market exclusivity.

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 product as an orphan product if it is 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, or a patient population of greater than 200,000 individuals in the United States, but for which there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. There can be no assurance that the FDA will grant orphan designation for any indication for which we apply.

In the United States, orphan designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. In addition, if a product candidate that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, it is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including an NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

We may seek designation of epetaborole and/or our future candidates as a Qualified Infectious Disease Product, or QIDP. Even if we receive such designation, there is no assurance that the FDA will approve a product candidate.

A QIDP is an antibacterial or antifungal drug intended to treat serious or life-threatening infections, including those caused by an antibacterial or antifungal resistant pathogen, including novel or emerging infectious pathogens or certain “qualifying pathogens.” Upon the approval of an NDA for a drug product designated by the FDA as a QIDP, the product is granted an additional period of five years of regulatory exclusivity. Even if we receive a QIDP designation for epetaborole or any future product candidate, there is no assurance that such product candidate will be approved by the FDA.

We intend to seek FDA approval using the limited-population antibacterial drug, or LPAD, pathway. We may not be able to obtain or maintain LPAD designations for epetaborole and/or any future candidates, and we may be unable to take advantage of the benefits associated with LPAD designation, including the potential for market exclusivity.

We intend to seek FDA approval for epetaborole using the LPAD pathway, through which the FDA reviews and approves new antibacterial drugs that address unmet medical needs for specific, limited populations of patients—particularly, those with serious and life-threatening bacterial infections that are resistant to current treatments. This pathway would potentially allow us to conduct more abbreviated pivotal trials. If we do not receive LPAD pathway approval (for example, because the FDA determines the trial does not meet the requirement of safety and efficacy necessary for approval), longer and more costly clinical trials may be required. The FDA does not determine if the LPAD pathway is applicable until the time of the NDA submission and this creates uncertainty as to the use of this pathway. Inmed’s Arikayce provides precedent in its approval using the LPAD pathway, although this does not guarantee approval for epetaborole. Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA or comparable foreign regulatory authority can subsequently approve the same drug for the same condition if such regulatory authority concludes that the later drug is clinically superior if it is shown to be safer, more effective, or makes a major contribution to patient care. Orphan drug designation 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.

Failure to obtain marketing approval in foreign jurisdictions would prevent epetaborole or our future product candidates from being marketed in these territories. Any approval we are granted for our product candidates in the United States would not assure approval of our product candidates in foreign jurisdictions.

In order to market and sell epetaborole or our future product candidates in the European Union, United Kingdom, Japan, other areas of Asia, and any other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain approval from the FDA. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining

approval from the FDA. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and data from clinical studies approved by the FDA may not be accepted by foreign regulatory agencies, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. However, failure to obtain approval in one jurisdiction may impact our ability to obtain approval elsewhere. We may not be able to file for marketing authorization and may not receive necessary approvals to commercialize our product candidates in any market.

Even if we obtain marketing approvals for epetaborole or any future product candidates, the terms of approvals and ongoing regulation of such product candidates may limit how we manufacture and market the product candidates and compliance with such requirements may involve substantial resources, which could materially impair our ability to generate revenue.

Even if marketing approval of epetaborole or any future product candidates is granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation, including the potential requirements to implement a risk evaluation and mitigation strategy or to conduct costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product. We must also comply with requirements concerning advertising and promotion for any of our product candidates for which we obtain marketing approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we will not be able to promote any products we develop for indications or uses for which they are not approved. In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements including ensuring that quality control and manufacturing procedures conform to cGMP, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We and our contract manufacturers could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMP.

Accordingly, assuming we receive marketing approval for one or more product candidates, we and our contract manufacturers will continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, and quality control. If we are not able to comply with post-approval regulatory requirements, we could have the marketing approvals for our product candidates withdrawn by regulatory authorities and our ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Thus, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

Any product candidate for which we obtain marketing approval could be subject to post-marketing restrictions or recall or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with epetaborole or any future product candidates, when and if any of them are approved.

The FDA and other federal and state agencies, including the U.S. Department of Justice, or the DOJ, closely regulate compliance with all requirements governing prescription drug products, including requirements pertaining to marketing and promotion of drugs in accordance with the provisions of the approved labeling and manufacturing of products in accordance with cGMP requirements. The FDA and DOJ impose stringent restrictions on manufacturers' communications regarding off-label use and if we do not market epetaborole or our future product candidates for their approved indications, we may

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be subject to enforcement action for off-label marketing. Violations of such requirements may lead to investigations alleging violations of the Food, Drug and Cosmetic Act and other statutes, including the False Claims Act and other federal and state health care fraud and abuse laws as well as state consumer protection laws.

Our failure to comply with all regulatory requirements, and later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, may yield various results, including:

- litigation involving patients taking our product candidates;
- restrictions on such products, manufacturers, or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with any potential collaborators;
- unfavorable press coverage and damage to our reputation;
- refusal to permit the import or export of our product candidates;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance by us or any future collaborator with regulatory requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with regulatory requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

Non-compliance with EU requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, also can result in significant financial penalties. Similarly, failure to comply with the EU's requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

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

We are exposed to the risk of employee fraud or other misconduct or failure to comply with applicable regulatory requirements. Misconduct by employees and independent contractors, such as principal investigators, CROs, consultants, commercial partners, and vendors, could include failures to comply with regulations of the FDA, the EMA, and other comparable regulatory authorities, to provide accurate information to such regulators, to comply with manufacturing standards we have established, to comply with healthcare fraud and abuse laws, to report financial information or data accurately, or to disclose unauthorized activities to us. In particular, sales, marketing, and other business arrangements in the healthcare industry are subject to extensive laws intended to prevent fraud, kickbacks, self-

dealing, and other abusive practices. These laws may restrict or prohibit a wide range of business activities, including, but not limited to, research, manufacturing, distribution, pricing, discounting, marketing, and promotion, sales commission, customer incentive programs, and other business arrangements. Employee and independent contractor misconduct could also involve the improper use of individually identifiable information, including, without limitation, information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. In addition, federal procurement laws impose substantial penalties for misconduct in connection with government contracts and require certain contractors to maintain a code of business ethics and conduct. It is not always possible to identify and deter employee and independent contractor misconduct, and any precautions we take to detect and prevent improper activities may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against us, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, disgorgement, possible exclusion from participation in Medicare, Medicaid, and other federal healthcare programs, contractual damages, reputational harm, diminished profits, and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment, or restructuring of our operations, any of which could adversely affect our ability to operate.

If we successfully commercialize epetraborole or one of our future product candidates, failure to comply with our reporting and payment obligations under U.S. governmental pricing programs could have a material adverse effect on our business, financial condition, and results of operations.

If we participate in the Medicaid Drug Rebate Program, Part D, if and when we successfully commercialize a product candidate, we will be required to report certain pricing information for such product candidate to the Centers for Medicare & Medicaid Services, the federal agency that administers the Medicaid and Medicare programs. We may also be required to report pricing information to the U.S. Department of Veterans Affairs. If we become subject to these reporting requirements, we will be liable for errors associated with our submission of pricing data, for failure to report pricing data in a timely manner, and for overcharging government payers, which can result in civil monetary penalties under the Medicaid statute, the federal civil False Claims Act, and other laws and regulations.

Our current and future relationships with healthcare professionals, principal investigators, consultants, customers, and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, physician payment transparency, health information privacy and security, and other healthcare laws and regulations, which could expose us to penalties.

Healthcare providers, 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 expose us to broadly applicable fraud and abuse and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, that may constrain the business or financial arrangements and relationships through which we research, sell, market, and distribute any product candidates for which we obtain marketing approval. In addition, we may be subject to physician payment transparency laws and patient privacy and security regulation by the federal government and by the states and foreign jurisdictions in which we conduct our business. The applicable federal, state, and foreign healthcare laws that may affect our ability to operate include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in

cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order, or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under federal and state healthcare programs such as Medicare and Medicaid;

- federal civil and criminal false claims laws, including the federal False Claims Act, which impose criminal and civil penalties, including through civil whistleblower or *qui tam* actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal civil monetary penalties statute, which imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of whether the payor is public or private, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose obligations on “covered entities,” including certain healthcare providers, health plans, and healthcare clearinghouses, as well as their respective “business associates” and their respective subcontractors that create, receive, maintain, or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security, and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act, created under Section 6002 of Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the ACA) and its implementing regulations, created annual reporting requirements for manufacturers of drugs, devices, biologicals, and medical supplies for certain payments and “transfers of value” provided to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. As of January 1, 2022, these reporting obligations will extend to include transfers of value made in the previous year to certain non-physician providers such as physician assistants and nurse practitioners; and
- analogous state and foreign laws, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign 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 and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or

marketing expenditures; state and local laws requiring the licensure of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Further, the ACA, among other things, amended the intent requirement of the federal Anti-Kickback Statute and certain criminal statutes governing healthcare fraud. A person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. In addition, the ACA provided that 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 False Claims Act.

Efforts to ensure that our future business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws. 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, including, without limitation, damages, monetary fines, disgorgement, possible exclusion from participation in Medicare, Medicaid, and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and pursue our strategy. If any of the physicians or other healthcare providers or entities with whom we expect to do business, including future collaborators, are found not to be in compliance with applicable laws, they may be subject to criminal, civil, or administrative sanctions, including exclusions from participation in government healthcare programs, which could also affect our business.

Changes in healthcare policies, laws, and regulations may impact our ability to obtain approval for, or commercialize epebraborole or our future product candidates, if approved.

In the United States and some foreign jurisdictions there have been, and continue to be, several legislative and regulatory changes and proposed reforms of the healthcare system in an effort to contain costs, improve quality, and expand access to care. In the United States, there have been and continue to be a number of healthcare-related legislative initiatives, as well as executive, judicial, and Congressional challenges to existing healthcare laws that have significantly affected, and could continue to significantly affect, the healthcare industry. For example, on June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Thus, the Affordable Care Act will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling, on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and remained open through August 15, 2021. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that the Affordable Care Act will be subject to judicial or Congressional challenges in the future. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under government payor programs and review the relationship between pricing and manufacturer patient programs. Further, based on a

recent executive order, the Biden administration expressed its intent to pursue certain policy initiatives to reduce drug prices. We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare products and services, which could result in reduced demand for epetaborole or our future product candidates or additional pricing pressures.

We are subject to privacy and data security laws, rules, regulations, policies, industry standards, and contractual obligations, and our failure to comply with them could harm our business.

We maintain a large quantity of sensitive information, including confidential business information and information related to our employees and we expect to maintain personal information in connection with the conduct of our clinical trials. As such, we are subject to laws and regulations governing the privacy and security of such information. In the United States, there are numerous federal and state privacy and data security laws and regulations governing the collection, use, disclosure, and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws, and federal and state consumer protection laws. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing focus on privacy and data protection issues, which may affect our business and is expected to increase our compliance costs and exposure to liability. In the United States, numerous federal and state laws and regulations could apply to our operations or the operations of our partners, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws and regulations, including Section 5 of the Federal Trade Commission Act, that govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, that are subject to privacy and security requirements under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and the regulations promulgated thereunder. Depending on the facts and circumstances, we could be subject to significant penalties if we obtain, use or disclose individually identifiable health information in a manner that is not authorized or permitted by HIPAA.

Compliance with these and any other applicable privacy and data security laws and regulations we may be subject to in the future is a rigorous and time-intensive process, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. If we fail to comply with any such laws or regulations, we may face significant fines and penalties that could adversely affect our business, financial condition, results of operations or prospects. Any failure by us or our third party processors to comply with these data protection and privacy laws and regulations could result in significant government enforcement actions, which could include civil, criminal, and administrative penalties, orders requiring that we change our practices, claims for damages, and other liabilities, regulatory investigations and enforcement action, private litigation, significant costs of remediation, and adverse publicity, any of which could negatively affect our operating results and business. Furthermore, the laws are not consistent, and compliance in the event of a widespread data breach is costly. In addition, states are constantly adopting new laws or amending existing laws, requiring attention to frequently changing regulatory requirements.

With laws, regulations, and other obligations relating to privacy and data protection imposing new and relatively burdensome obligations, and with the substantial uncertainty over the interpretation and application of these and other obligations, we may face challenges in addressing their requirements and making necessary changes to our policies and practices and may incur significant costs and expenses in an effort to do so. We are currently in the process of developing and updating our policies and procedures in accordance with requirements under applicable data privacy and protection laws and regulations. We do not currently have any formal data privacy policies and procedures in place and have not completed formal assessments of whether we are in compliance with all applicable data

privacy laws and regulations. Additionally, if third parties with which we work, such as vendors or service providers, violate applicable laws, rules or regulations or our policies, such violations may also put our or our clinical trial and employee data, including personal data, at risk, and our business, financial condition, results of operations, and prospects may be adversely affected.

Our product candidates may be subject to government price controls that may affect our revenue.

There has been heightened governmental scrutiny in the United States and abroad of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. In the United States, such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the state level, legislatures have become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access, and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Outside of the United States, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain coverage and reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of epetraborole or our future product candidates to other available therapies. If reimbursement of our product candidates is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed.

If we fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health, and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment, and disposal of hazardous materials and wastes. Our operations involve the use of hazardous materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials.

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

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

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector.

We may engage third parties to sell epetaborole or our future product candidates outside the United States, to conduct clinical trials, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract, and fraud litigation, reputational harm, and other consequences.

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

An active trading market for our common stock may not develop and you may not be able to resell your shares at or above the initial offering price, if at all.

This offering constitutes the initial public offering of our common stock, and no public market has previously existed for our common stock. We have applied to list our common stock on The Nasdaq Global Market. Any delay in the commencement of trading of our common stock on The Nasdaq Global Market would impair the liquidity of the market for the shares and make it more difficult for holders to sell their shares of our common stock. If our common stock is listed and quoted on The Nasdaq Global Market, there can be no assurance that an active trading market for the shares will develop or be sustained after this offering is completed. The initial offering price will be determined by negotiations among the lead underwriters and us. Among the factors to be considered in determining the initial public offering price are our future prospects and the prospects of our industry in general, our financials and certain other financial and operating information in recent periods, and the market prices of securities and certain financial and operating information of companies engaged in activities similar to ours. However, there can be no assurance that, following the completion of this offering, the shares of our common stock will trade at a price equal to or greater than the public offering price.

The trading price of our common 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. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the

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operating performance of particular companies. As a result of this volatility, investors may not be able to sell their shares at or above the price paid for the shares. 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 planned and future clinical trials;
- the loss of any of our key research, development, or management personnel;
- regulatory or legal developments in the United States and other countries;
- the success of competitive products or technologies;
- adverse actions taken by regulatory agencies with respect to our clinical trials or manufacturers;
- changes or developments in laws or regulations applicable to epetraborole or any future product candidates;
- changes to our relationships with collaborators, manufacturers, or suppliers;
- the results of our testing and clinical trials;
- unanticipated safety, tolerability, or efficacy concerns;
- announcements concerning our competitors or the pharmaceutical industry in general;
- actual or anticipated fluctuations in our operating results;
- changes in financial estimates or recommendations by securities analysts;
- potential acquisitions;
- the results of our efforts to discover, develop, acquire, or in-license additional product candidates;
- the trading volume of our common stock on The Nasdaq Global Market;
- sales of our common stock by us, our executive officers and directors or our stockholders or the anticipation that such sales may occur in the future;
- general economic, political, and market conditions and overall fluctuations in the financial markets in the United States or the United Kingdom (including those relating to macroeconomic events, such as the COVID-19 pandemic);
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the biopharmaceutical industry; and
- investors' general perception of us and our business.

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from selling their shares of our common stock at or above the price paid for the shares and may otherwise negatively affect the liquidity of our common stock. 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.

Some companies that have experienced volatility in the trading price of their shares have been the subject of securities class action litigation. Any lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment. We also may decide to settle lawsuits on unfavorable terms. Any such negative outcome could result in payments of substantial damages or fines, damage to our reputation or adverse changes to our business practices. Defending against litigation is costly and time-consuming and could divert our management's attention and our resources. Furthermore, during the course of litigation, there could be negative public announcements of the results of hearings, motions or other interim proceedings or developments, which could have a negative effect on the market price of our common stock.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price, and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that equity research analysts publish about us and our business. We do not currently have and may never obtain research coverage by equity research analysts. Equity research analysts may elect not to provide research coverage of our common stock after the completion of this offering, and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our shares could decline if one or more equity research analysts downgrade our shares or issue other unfavorable commentary or research about us. If one or more equity research analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares could decrease, which in turn could cause the trading price or trading volume of our common stock to decline.

If you purchase common stock in this offering, you will suffer immediate dilution of your investment.

The initial public offering price per share of our common stock is substantially higher than the pro forma as adjusted net tangible book value per share. Therefore, if you purchase common stock in this offering, you will pay a price per share that substantially exceeds our pro forma as adjusted net tangible book value per share after this offering. Based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ _____ per share, representing the difference between our pro forma as adjusted net tangible book value per share after this offering and the assumed initial public offering price per share. After this offering, we will also have outstanding options to purchase shares of our common stock with exercise prices lower than the initial public offering price. To the extent these outstanding options are exercised, there will be further dilution to investors in this offering. For further information regarding the dilution resulting from this offering, see the section titled "Dilution" in this prospectus.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time, subject to the restrictions and limitations described below. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market following this offering, the market price of our common stock could decline significantly.

Upon the closing of this offering, we will have _____ outstanding shares of common stock, after giving effect to the conversion of _____ outstanding shares of redeemable convertible preferred stock, into an equal number of shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options. Of these shares, the shares sold in this offering will be freely tradable and the remaining shares of common stock will be available for sale in the public market beginning after the end of the 180th day after the date of this prospectus following the expiration of lock-up agreements between our stockholders and certain of the underwriters for this offering, subject, in the case of our affiliates, to the conditions of Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. _____, on behalf of the underwriters, may release these stockholders from their lock-up agreements at any time and without notice, which would allow for earlier sales of shares in the public market subject to the conditions of Rule 144 under the Securities Act.

In addition, promptly following the closing of this offering, we intend to file one or more registration statements on Form S-8 registering the issuance of approximately _____ million shares of common stock

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subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options, the lock-up agreements described above and, in the case of our affiliates, the restrictions of Rule 144 under the Securities Act.

Additionally, after this offering, the holders of an aggregate of _____ shares of our common stock, or their transferees, will have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If we were to register the resale of these shares, they could be freely sold in the public market without limitation. If these additional shares 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.

Concentration of ownership of our common stock among our existing executive officers, directors, and principal stockholders may prevent new investors from influencing significant corporate decisions and matters submitted to stockholders for approval.

Upon completion of this offering, our executive officers, directors, and current beneficial owners of 5% or more of our common stock and their respective affiliates will, in the aggregate, beneficially own _____ % of our outstanding common stock, based on the number of shares of our common stock outstanding as of _____, 2021 and after giving effect to the conversion of 4,849,064 outstanding shares of redeemable convertible preferred stock (including the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in March 2021), into an equal number of shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options. Assuming an initial public offering price of \$ _____ per share, if our existing principal stockholders and their respective affiliates purchase all of the shares of common stock they have indicated an interest in purchasing in this offering, the number of shares of common stock beneficially owned by our existing executive officers, directors, and principal stockholders (and their affiliates) will, in the aggregate, increase to _____ % of our outstanding common stock. As a result, these persons, acting together, would be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation or sale of all or substantially all of our assets, or other significant corporate transactions. In addition, these persons, acting together, may have the ability to control the management and affairs of our company. Accordingly, this concentration of ownership may harm the market price of our common stock by:

- delaying, deferring, or preventing a change in control;
- entrenching our management and/or the board of directors;
- impeding a merger, consolidation, takeover, or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

In addition, some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws that will become effective upon the completion of this offering may discourage, delay or prevent a merger, acquisition, or other change in control of our company that stockholders may consider

favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

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

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired more than 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States will be the exclusive forums for substantially all disputes between us and our stockholders, including claims under the Securities Act, 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 the Court of Chancery of the State of Delaware is the exclusive forum for:

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

Our amended and restated certificate of incorporation will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

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 additional costs associated with resolving the dispute in other jurisdictions.

We are an “emerging growth company” and as a result of the reduced disclosure and governance requirements applicable to emerging growth companies, our common stock may be less attractive to investors.

We are an “emerging growth company” as defined in the JOBS Act. For so long as we remain an emerging growth company, we are permitted by SEC rules and plan to rely on exemptions from certain disclosure requirements that are applicable to other SEC-registered public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404, not being required to comply with the auditor requirements to communicate critical audit matters in the auditor's report on the financial statements, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. We have taken advantage of reduced reporting burdens in this prospectus. In particular, in this prospectus, we have provided only two years of audited financial statements and we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we 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 allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, 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 incur significantly increased costs as a result of operating as a company whose common stock is publicly traded in the United States, and our management will be required to devote substantial time to new compliance initiatives.

As a public company in the United States, we will incur significant legal, accounting, and other expenses that we did not incur previously. These expenses will likely be even more significant after we no longer qualify as an emerging growth company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on public companies in the United States, including the establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our senior management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to

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attract and retain qualified senior management personnel or members for our board of directors. We cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404, we will be required to furnish a report by our senior management on our internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To prepare for eventual compliance with Section 404, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants, and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. Identifying material weaknesses could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

We will have broad discretion in the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not increase the value of your investment.

Our management will have broad discretion in the application of our cash, including the net proceeds from this offering, and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a negative impact on our business, cause the price of our common stock to decline, and delay the development of epetaborole and planned pipeline and expansion programs as well as commercial preparedness. Pending their use, we may invest our cash, including the net proceeds from this offering, in a manner that does not produce value or that loses value. See the section titled "Use of Proceeds" for additional information.

We do not anticipate paying any cash dividends on our capital stock in the foreseeable future, and accordingly, stockholders must rely on capital appreciation, if any, for any return on their investment.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. In addition, any future credit facility or debt securities may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. If we do not pay cash dividends, you could receive a return on your investment in our common stock only if you are able to sell your shares in the future and the market price of our common stock has increased when you sell your shares. As a result, investors seeking cash dividends should not purchase our common stock.

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

As of December 31, 2020, we had federal and state net operating loss, or NOLs, carryforwards of approximately \$12.2 million and \$12.4 million, respectively. Under the Tax Cuts and Jobs Act of 2017,

or the Tax Act, as modified by the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, our NOLs generated in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal NOLs in tax years beginning after December 31, 2020, is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to the Tax Act or the CARES Act. In addition, under Sections 382 and 383 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past and may experience ownership changes as a result of this offering and/or subsequent shifts in our stock ownership (some of which may be outside our control). As a result, our ability to use our pre-change NOLs and tax credits to offset post-change taxable income, if any, could be subject to limitations. Similar provisions of state tax law may also apply. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, California recently imposed limits on the usability of California state NOLs and tax credits to offset California taxable income in tax years beginning after December 31, 2019 and before January 1, 2023. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and tax credits.

Recent and potential future changes to U.S. and non-U.S. tax laws could materially adversely affect our company.

Existing, new, or future changes in tax laws, regulations, and treaties, or the interpretation thereof, in addition to tax policy initiatives and reforms under consideration in the United States or internationally and other initiatives could have an adverse effect on the taxation of international businesses. Furthermore, countries where we are subject to taxes, including the United States, are independently evaluating their tax policy and we may see significant changes in legislation and regulations concerning taxation. On December 22, 2017, President Trump signed into law the Tax Act, which significantly revised the Code. The overall impact of the Tax Act is uncertain and our business and financial condition could be adversely affected. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. Other legislative changes could also affect the taxation of holders of our common stock. We are unable to predict what tax reform may be proposed or enacted in the future or what effect such changes would have on our business, but such changes, to the extent they are brought into tax legislation, regulations, policies or practices, could affect our effective tax rates in the future in countries where we have operations and have an adverse effect on our overall tax rate in the future, along with increasing the complexity, burden, and cost of tax compliance. We urge our stockholders to consult with their legal and tax advisors with respect to any such legislative changes and the potential tax consequences of investing in or holding our common stock.

Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement, data protection, and other losses.

Our agreements with third parties may include indemnification provisions under which we agree to indemnify them for losses suffered or incurred as a result of claims of intellectual property infringement or other liabilities relating to or arising from our contractual obligations. Large indemnity payments could harm our business and financial condition. Although we normally contractually limit our liability with respect to such obligations, we may still incur substantial liability. Any dispute with a third party with respect to such obligations could have adverse effects on our relationship with that third party and relationships with other existing or new partners, harming our business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

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

- our use of the net proceeds from this offering;
- the initiation, timing, progress, and results of our preclinical and nonclinical studies and clinical trials, and our research and development programs, including the manufacture of clinical trial material and drug product for launch;
- our ability to retain the continued service of our key professionals and to identify, hire, and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- the commercialization of our product candidates, if approved;
- the pricing, coverage, and reimbursement of our product candidates, if approved;
- the implementation of our business model, strategic plans for our business, and product candidates;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;
- our estimates regarding expenses, capital requirements, and needs for additional financing;
- our financial performance; and
- developments relating to our competitors and our industry.

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

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In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

MARKET, INDUSTRY, AND OTHER DATA

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

USE OF PROCEEDS

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

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

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

We currently intend to use the net proceeds we receive from this offering, together with our existing cash, as follows:

- approximately \$ _____ to fund the clinical development of epetraborole for treatment-refractory NTM lung disease caused by MAC through the receipt of topline data from our planned Phase 2/3 pivotal clinical trial and manufacturing and other pre-commercialization activities;
- approximately \$ _____ to fund the expansion of epetraborole in treatment-refractory NTM lung disease in other key markets, with an initial focus on Japan, as well as in other NTM indications such as treatment-naïve NTM lung disease and *M. abscessus* lung infections; and
- the remainder to fund the further development of our AN2 drug discovery platform and for general corporate purposes, including working capital and operating expenses.

We may also use a portion of the net proceeds and our existing cash to in-license, acquire, or invest in complementary businesses, technology platforms, 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, will be sufficient to fund our operations for at least the next 24 months. Our expected use of proceeds from this offering described above represents our current intentions based on our present plans and business conditions. 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 existing cash, will not be sufficient for us to fund epetraborole through regulatory approval, and we anticipate needing to raise additional capital to commercialize epetraborole and to develop any future product candidates.

The amounts and timing of our actual expenditures will depend on numerous factors, including the time and cost necessary to conduct our planned clinical trials, the results of our planned clinical trials

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and other factors described in the section titled “Risk Factors” in this prospectus, as well as the amount of cash used in our operations and any unforeseen cash needs. Therefore, our actual expenditures may differ materially from the estimates described above. We may find it necessary or advisable to use the net proceeds for other purposes. We will have broad discretion over how to use the net proceeds to us from this offering. We intend to invest the net proceeds to us from this offering that are not used as described above in short-term, investment-grade, interest-bearing instruments.

DIVIDEND POLICY

We do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our capital stock. We intend to retain all available funds and future earnings, if any, to fund the development and expansion of our business. Any future determination regarding the declaration and payment of dividends, if any, will be at the discretion of our board of directors, subject to applicable laws, and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant. In addition, our ability to pay cash dividends on our capital stock in the future may be limited by the terms of any future debt or preferred securities we issue or any credit facilities we enter into.

CAPITALIZATION

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

- on an actual basis;
- on a pro forma basis, giving effect to the (i) issuance of 2,266,661 shares of our Series B redeemable preferred stock in March 2021 for net proceeds of approximately \$79.7 million, (ii) automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of our common stock, which will occur upon the closing of this offering, and the related reclassification of the carrying value of our redeemable convertible preferred stock to permanent equity upon the closing of this offering, and (iii) filing and effectiveness of our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering; and
- on a pro forma as adjusted basis, giving effect to the (i) pro forma adjustments set forth above and (ii) our receipt of net proceeds from the sale of _____ shares of common stock in this offering at the assumed initial public offering price of \$ _____ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with the sections titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Description of Capital Stock,” and our financial statements and the related notes included elsewhere in this prospectus.

	As of December 31, 2020		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands, except share and per share amounts)		
Cash	\$ 4,070	\$ 83,803	\$
Series A redeemable convertible preferred stock, \$0.00001 par value per share; 2,582,403 shares authorized, 2,582,403 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma, and pro forma as adjusted	\$ 23,070	\$ –	\$
Series B redeemable convertible preferred stock, \$0.00001 par value per share; no shares authorized, issued and outstanding, actual, pro forma, and pro forma as adjusted	–	–	
Stockholders’ (deficit) equity:			
Preferred stock, \$0.00001 par value per share; no shares authorized, issued or outstanding, actual; _____ shares authorized, pro forma and pro forma as adjusted; no shares issued or outstanding, pro forma, and pro forma as adjusted	–	–	
Common stock, \$0.00001 par value per share; 7,295,839 shares authorized, 1,150,679 shares issued and outstanding, actual; _____ shares authorized, pro forma and pro forma as adjusted; 5,999,743 shares issued and outstanding, pro forma; _____ shares issued and outstanding, pro forma as adjusted	–	–	
Additional paid-in capital	–	102,803	
Accumulated deficit	(20,319)	(20,319)	
Total stockholders’ (deficit) equity	(20,319)	82,484	
Total capitalization	\$ 2,751	\$ 82,484	\$

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The pro forma as adjusted information above 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. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share would increase or decrease, as applicable, each of our pro forma as adjusted cash, additional paid-in capital, total stockholders' deficit and total capitalization by approximately \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares common stock offered by us would increase or decrease, as applicable, each of our pro forma as adjusted cash, additional paid-in capital, total stockholders' deficit, and total capitalization by approximately \$ million, assuming the assumed initial public offering price of \$ per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock to be issued and outstanding, pro forma, and pro forma as adjusted in the table above is based on 5,999,743 shares of common stock outstanding as of December 31, 2020, after giving effect to the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in March 2021, and the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of our common stock upon the closing of this offering, and excludes:

- 127,343 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 \$0.99 per share;
- 473,746 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to December 31, 2020, with a weighted-average exercise price of \$15.52 per share;
- shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan; and
- shares of our common stock reserved for issuance under our ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

DILUTION

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

As of December 31, 2020, we had a historical net tangible book deficit of \$20.3 million, or \$17.66 per share of common stock based on the 1,150,679 shares of common stock outstanding as of such date. Our historical net tangible book value (deficit) per share represents total tangible assets less total liabilities and redeemable convertible preferred stock, which is not included within permanent equity, divided by the number of shares of common stock outstanding as of December 31, 2020.

Our pro forma net tangible book value as of December 31, 2020 was \$2.8 million, or \$0.46 per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by 5,999,743 shares of common stock outstanding as of such date, after giving effect to (i) the issuance of 2,266,661 shares of our Series B redeemable convertible preferred stock in March 2021 for net proceeds of approximately \$79.7 million, (ii) the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of our common stock and the related reclassification of the carrying value of our redeemable convertible preferred stock to permanent equity 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 immediately after the closing of this offering.

After giving effect to the sale by us of _____ shares of common stock in this offering at the assumed initial public offering price of \$ _____ per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2020 would have been \$ _____ million, or \$ _____ per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value of \$ _____ per share to investors purchasing common stock in this offering. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share after this offering from the amount of cash paid by an investor for a share of common stock in this offering. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book deficit per share as of December 31, 2020	\$(17.66)
Pro forma increase in historical net tangible book value per share attributable to the pro forma transaction described in the preceding paragraphs	<u>\$ 18.12</u>
Pro forma net tangible book value per share as of December 31, 2020	\$ 0.46
Increase in pro forma as adjusted net tangible book value per share attributable to investors purchasing shares in this offering	<u> </u>
Pro forma as adjusted net tangible book value per share after this offering	<u> </u>
Dilution in pro forma as adjusted net tangible book value per share to investors purchasing shares in this offering	<u> </u> <u>\$</u>

The dilution information discussed above is illustrative only and may change based on the actual initial public offering price and other terms of this offering. Each \$1.00 increase or decrease in the

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

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

The foregoing discussion and tables above (other than the historical net tangible book value calculation) are based on 5,999,743 shares of common stock outstanding as of December 31, 2020, after giving effect to the issuance of 2,266,661 shares of Series B redeemable convertible preferred stock in March 2021, and the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 4,849,064 shares of our common stock upon the closing of this offering, and excludes:

- 127,343 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 \$0.99 per share;
- 473,746 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to December 31, 2020, with a weighted-average exercise price of \$15.52 per share;
- _____ shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under our 2021 Plan; and
- _____ shares of our common stock reserved for issuance under our ESPP, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for future issuance under our ESPP.

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 analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations related to future events and our future financial performance that involve risks, uncertainties and assumptions, such as statements regarding our intentions, plans, objectives, and expectations for our business. Our actual results and the timing of selected events could differ materially from those described in or implied by these forward-looking statements as a result of several factors, including those set forth in the section titled "Risk Factors." See also the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biopharmaceutical company developing treatments for rare, chronic, and serious infectious diseases with high unmet needs. Our initial product candidate is epetraborole, a once-daily, oral treatment for patients with chronic non-tuberculous mycobacterial, or NTM, lung disease. Epetraborole has broad spectrum antimycobacterial activity through inhibition of an essential and universal step in bacterial protein synthesis. Its novel mechanism of action is enabled by boron chemistry, our core technology approach. We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the FDA, we believe has the potential to be sufficient for regulatory approval in the United States. Assuming clearance of our planned IND application to the U.S. Food and Drug Administration, or FDA, we plan to initiate patient enrollment in this trial in _____ with topline results anticipated in _____. Based on clinical and preclinical data generated with epetraborole, its novel mechanism of action, and the convenience associated with once-daily, oral dosing, we believe that epetraborole has the potential to become the backbone of a multi-drug treatment regimen for patients suffering from NTM lung disease.

Since launching operations in November 2019, we have devoted substantially all of our resources to developing our initial product candidate. We have incurred significant operating losses to date. We expect that our operating expenses will increase significantly as we advance our current and future product candidates through preclinical, nonclinical and clinical development, seek regulatory approval, and prepare for and, if approved, proceed to commercialization; acquire, discover, validate, and develop additional product candidates; obtain, maintain, protect, and enforce our intellectual property portfolio; and hire additional personnel. In addition, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company.

We do not have any products approved for sale and have not generated any revenue since inception. Our net losses were \$5.6 million and \$13.6 million for the years ended December 31, 2019 and 2020, respectively. As of December 31, 2020, we had an accumulated deficit of \$20.3 million. We have funded our operations from the sale and issuance of redeemable convertible preferred stock. In November 2019 and October 2020, we raised an aggregate of \$12.0 million from the sale of Series A redeemable convertible preferred stock. As of December 2020, we had a cash balance of \$4.1 million. In March 2021, we raised \$80.0 million from the sale of Series B redeemable convertible preferred stock. We believe that our available cash will be sufficient to fund our planned operations for at least 12 months following the date of this offering.

Our ability to generate product revenue will depend on the successful development, regulatory approval and eventual commercialization of one or more of our product candidates. Until such time as we can generate revenue from our product sales, if ever, we expect to finance our operations through private or public equity or debt financings, collaborative or other arrangements with corporate sources, non-dilutive financing, or through other sources of financing. Adequate funding may not be available to

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us on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as and when needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of our product candidates.

We plan to continue to use third-party service providers, including outside research laboratories, clinical research organizations, or CROs, and contract manufacturing organizations, or CMOs, to carry out our preclinical, nonclinical, and clinical development, and to manufacture and supply the materials to be used during the development and commercialization of our product candidates. We do not currently have a sales force. If epetraborole is approved for the treatment of NTM lung disease, we intend to hire and deploy a specialty sales force, which will increase our operating costs.

Components of Our Operating Results

Operating Expenses

Research and Development Expenses

Substantially all of our research and development expenses consist of expenses incurred in connection with the development of our initial product candidate. These expenses include fees incurred under arrangements with third parties, including CROs, CMOs, preclinical and nonclinical testing organizations, and academic and non-profit institutions. Research and development expenses also include consulting fees, license fees, payroll, and personnel-related expenses, including salaries and bonuses, payroll taxes, employee benefit costs, and non-cash stock-based compensation for our research and development employees. We expense both internal and external research and development expenses as they are incurred.

In November 2019, we entered into an exclusive worldwide license agreement with Anacor Pharmaceuticals, Inc., or Anacor, for certain compounds and other intellectual property controlled by Anacor for the treatment, diagnosis, or prevention of all human diseases. In exchange for the worldwide, sublicenseable, exclusive right and licenses to develop, manufacture, and commercialize the specified compounds, we paid Anacor a \$2.0 million upfront payment and issued Anacor 466,376 shares of Series A redeemable convertible preferred stock in November 2019, and an additional 112,688 shares in October 2020 in conjunction with the first and second closings of our Series A financing, respectively. For financial reporting purposes, the fair market value of the shares issued to Anacor was \$5.79 per share, as compared to the Series A issuance price of \$5.99 per share. See "Business—License Agreement with Anacor Pharmaceuticals, Inc." for additional information.

Costs are not tracked on a project-by-project basis, because substantially all of our research and development resources to date are focused primarily on our lead drug product candidate, epetraborole. Our research and development costs include internal costs, such as payroll and other personnel expenses, and external costs, such as license payments and fees paid to third parties to conduct research and development activities on our behalf. The following table shows our research and development expenses by type of activity:

	Year Ended	
	December 31,	
	2019	2020
	(in thousands)	
License agreement—related party	\$4,702	\$ 653
Clinical, nonclinical and preclinical expenses	131	2,688
Chemistry, Manufacturing and Controls (CMC) expenses	47	2,359
Regulatory and other expenses	9	319
Total research and development expenses	<u>\$4,889</u>	<u>\$6,019</u>

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We expect our research and development expenses to increase substantially following this offering, and in the future, as we advance epeptaborole and any future products into and through additional clinical trials and pursue regulatory approval. The process of conducting the necessary clinical studies to obtain regulatory approval is costly and time-consuming. Clinical studies generally become larger and more costly to conduct as they advance into later stages and, in the future, we will be required to make estimates for expense accruals related to clinical study expenses, which involve a degree of estimation. The successful development of our product candidates is highly uncertain. The actual probability of success for our product candidates may be affected by a variety of risks and uncertainties associated with drug development, including those set forth in the section of this prospectus titled "Risk Factors." At this time, we cannot reasonably estimate the nature, timing, or costs required to complete the remaining development of our current or any future product candidates. As a result of these uncertainties, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates.

General and Administrative Expenses

Our general and administrative expenses consist primarily of payroll and personnel-related expenses, including salaries and bonuses, payroll taxes, employee benefit costs, and non-cash stock-based compensation. Other general and administrative expenses include legal costs of pursuing patent protection of our intellectual property, and professional service fees for auditing, tax, and general legal services. We expect our general and administrative expenses to continue to increase in the future as we increase our headcount, expand our operating activities, prepare for potential commercialization of our current and future product candidates, and support our operations as a public company, including increased expenses related to legal, accounting, regulatory, and tax-related services associated with maintaining compliance with requirements of The Nasdaq Global Market and the SEC, directors and officers liability insurance premiums and investor relations activities.

Interest Income

Interest income consists of interest income earned on our cash deposits.

Other Expense

Other expense consists of changes to the estimated fair value of the redeemable convertible preferred stock tranche liability.

Results of Operations

Comparison of the Years Ended December 31, 2019 and 2020

The following table sets forth the significant components of our results of operations:

	Year Ended December 31,		Change	% Change
	2019	2020		
	(in thousands, except percentages)			
Operating Expenses:				
Research and development	\$ 187	\$ 5,366	\$ 5,179	2770%
Research and development—related party	4,702	653	(4,049)	(86)
General and administrative	289	1,265	976	338
Total operating expenses	<u>5,178</u>	<u>7,284</u>	<u>2,106</u>	<u>41</u>
Loss from operations	(5,178)	(7,284)	(2,106)	(41)
Interest income	—	3	3	—
Other expense	(457)	(6,322)	(5,865)	(1283)
Net loss	<u><u>\$ (5,635)</u></u>	<u><u>\$ (13,603)</u></u>	<u><u>\$ (7,968)</u></u>	<u><u>(141)</u></u>

Research and Development Expenses

Research and development expenses were \$0.2 million for the year ended December 31, 2019 compared to \$5.4 million for the year ended December 31, 2020. The increase of \$5.2 million was primarily due to increases in personnel-related expenses and expenses related to outside services, consultants and manufacturing. Personnel-related costs increased by \$1.5 million, as a direct result of our increased research and development headcount. Outside services and consultants increased by \$3.7 million for preclinical testing and manufacturing.

Research and Development Expenses—Related Party

Research and development expenses—related party were \$4.7 million for the year ended December 31, 2019 compared to \$0.7 million for the year ended December 31, 2020. The decrease of \$4.0 million was a result of our \$4.7 million up-front payment to Anacor and issuance of redeemable convertible preferred stock to Anacor in 2019 and the \$0.7 million issuance of redeemable convertible preferred stock to Anacor in 2020. See “Business—License Agreement with Anacor Pharmaceuticals, Inc.” for additional information.

General and Administrative Expenses

General and administrative expenses were \$0.3 million for the year ended December 31, 2019 compared to \$1.3 million for the year ended December 31, 2020. The increase of \$1.0 million was primarily attributable to a \$0.8 million increase in personnel-related costs as we expanded our headcount, and a \$0.2 million increase in outside services for patent and professional services to support our ongoing operations.

Interest Income

Interest income was immaterial for the years ended December 31, 2019 and 2020.

Other Expense

Other expense was \$0.5 million during the year ended December 31, 2019 compared to other expense of \$6.3 million for the year ended December 31, 2020. The other expense increase was attributable to an increase in the fair value of the redeemable convertible preferred stock tranche liability of \$6.3 million.

Liquidity and Capital Resources

Sources of Liquidity

From our inception through August 31, 2021, we have funded our operations through private placements of our redeemable convertible preferred stock and have raised net cash proceeds of \$91.6 million from the issuance of our redeemable convertible preferred stock. Key financing and corporate milestones include:

- In November 2019, we raised net cash proceeds of \$8.1 million from issuance of our Series A redeemable convertible preferred stock.
- In October 2020, we raised net cash proceeds of \$3.8 million from additional issuances of our Series A redeemable convertible preferred stock.
- In March 2021, we raised net cash proceeds of \$79.7 million from issuance of our Series B redeemable convertible preferred stock.

Additionally, we do not expect positive cash flows from operations in the foreseeable future.

Future Funding Requirements

We have incurred net losses since our inception. For the years ended December 31, 2019 and 2020, we had net losses of \$5.6 million and \$13.6 million, respectively, and we expect to incur

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substantial additional losses in future periods. As of December 31, 2020, we had an accumulated deficit of \$20.3 million. Based on our current business plan, we believe that our available cash will be sufficient to fund our planned operations for at least 12 months following the date of this offering.

We do not have any products approved for sale, and we have never generated any revenue from contracts with customers. We do not expect to generate any meaningful revenue unless and until we obtain regulatory approval of and commercialize any of our current and future product candidates and we do not know when, or if, those events will occur. Historically, we have incurred operating losses and negative cash flows as a result of ongoing efforts to develop our lead drug product candidate, epetaborole, including conducting ongoing preclinical and nonclinical studies, current and future clinical trials, clinical trial materials manufacturing, and providing general and administrative support for these operations. We expect our negative cash flows to increase significantly over the next several years as we advance epetaborole and any future product candidates through clinical development, seek regulatory approval, prepare for and, if approved, proceed to commercialization, and continue our research and development efforts. We are subject to all the risks typically related to the development of new product candidates, and we may encounter unforeseen expenses, difficulties, complications, delays, and other unknown factors that may adversely affect our business. Moreover, following the completion of this offering, we expect to incur additional costs associated with operating as a public company. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Until we can generate a sufficient amount of revenue from the commercialization of our product candidates, if ever, we expect to finance our future cash needs through public or private equity offerings or debt financings. Additional capital may not be available on reasonable terms, if at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our current or future product candidates. If we raise additional funds by issuing equity or convertible debt securities, it could result in dilution to our existing stockholders and increased fixed payment obligations. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing stockholders. If we incur indebtedness, we could become subject to covenants that would restrict our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term but we may have to relinquish valuable rights to our product candidates or grant licenses on terms that are not favorable to us. Any of the foregoing could significantly harm our business, financial condition and prospects.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of product candidates, we are unable to estimate the exact amount of our operating capital requirements. Our future capital requirements depend on many factors, including:

- the scope, timing, rate of progress, results, and costs of our preclinical and nonclinical development activities and clinical trials for our current and future product candidates;
- the timing of, and the costs involved in, obtaining regulatory approvals for our drug product candidates;
- the scope and costs of development and commercial manufacturing activities;
- the number and characteristics of any additional product candidates we develop or acquire;
- the cost of manufacturing our product candidates that we successfully commercialize;

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- the cost of building a specialty sales force in anticipation of product commercialization;
- the cost of commercialization activities, including building a commercial infrastructure, marketing, sales, and distribution costs;
- our ability to maintain existing, and establish new strategic collaborations, licensing, or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty, or other payments due under any such agreement;
- any product liability or other lawsuits related to our products;
- the expenses needed to attract, hire, and retain skilled personnel;
- our implementation of operational, financial, and management systems;
- the costs associated with being a public company;
- the costs involved in preparing, filing, prosecuting, maintaining, defending, and enforcing our intellectual property portfolio; and
- the timing, receipt, and amount of sales of any future approved products, if any.

A change in the outcome of any of these or other variables with respect to the development of any of our current and future product candidates could significantly change the costs and timing associated with the development of that product candidate. Furthermore, our operating plans may change in the future, and we will continue to require additional capital to meet operational needs and capital requirements associated with such operating plans. Any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitation on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make certain investments or engage in certain merger, consolidation or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders.

Adequate funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed could have a negative impact on our financial condition and ability to pursue our business strategies. If we are unable to raise additional funds when needed, we may be required to delay, reduce or terminate some or all of our development programs and clinical trials or we may also be required to terminate rights to our current and future product candidates. If we are required to enter into collaborations and other arrangements to supplement our funds, we may have to give up certain rights that limit our ability to develop and commercialize our product candidates or may have other terms that are not favorable to us or our stockholders, which could materially affect our business and financial condition.

See the section of this prospectus titled "Risk Factors" for additional risks associated with our substantial capital requirements.

Summary Statement of Cash Flows

The following table sets forth a summary of the primary sources and uses of cash:

	Year Ended December 31,	
	2019	2020
	(in thousands)	
Cash used in operating activities	\$(2,486)	\$(5,364)
Cash provided by financing activities	8,084	3,836
Net increase/(decrease) in cash	<u>\$ 5,598</u>	<u>\$(1,528)</u>

Cash Used in Operating Activities

Net cash used in operating activities was \$2.5 million for the year ended December 31, 2019. Cash used in operating activities was primarily due to the use of funds in our operations to start up and

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commence operations and initiate development of our initial product candidate resulting in a net of loss of \$5.6 million and an increase in prepaid expenses and other current assets of \$0.1 million, partially offset by the non-cash expense on issuance of our Series A redeemable convertible preferred stock in connection with the Anacor license agreement of \$2.7 million and the change in fair value of our redeemable convertible preferred stock tranche liability of \$0.5 million.

Net cash used in operating activities was \$5.4 million for the year ended December 31, 2020. Cash used in operating activities was primarily due to the use of funds in our operations to develop our initial product candidate resulting in a net loss of \$13.6 million and an increase in prepaid expenses and other current assets of \$0.1 million, partially offset by the non-cash expense on issuance of our Series A redeemable convertible preferred stock in connection with the Anacor license agreement of \$0.7 million, the change in fair value of our redeemable convertible preferred stock tranche liability of \$6.3 million and an increase in accounts payable and accrued liabilities of \$1.3 million due to an increase in accrued research and development expenses and accrued compensation.

Cash Provided by Financing Activities

Net cash provided by financing activities was \$8.1 million for the year ended December 31, 2019, which consisted of net proceeds from the first closing of our Series A redeemable convertible preferred stock.

Net cash provided by financing activities was \$3.8 million for the year ended December 31, 2020, which consisted primarily of net proceeds from the second closing of our Series A redeemable convertible preferred stock.

Contractual Obligations and Commitments

In November 2019, we entered into an exclusive worldwide license agreement with Anacor for certain compounds and other intellectual property controlled by Anacor for the treatment, diagnosis, or prevention of disease. In exchange for the worldwide, sublicensable, exclusive right and licenses to develop, manufacture, and commercialize the specified compounds, we paid Anacor a \$2.0 million upfront payment in November 2019 and issued Anacor 466,376 shares of Series A Preferred Stock in November 2019, and an additional 112,688 shares in October 2020 in conjunction with the first and second closings of our Series A redeemable convertible preferred stock financing, respectively. For financial reporting purposes, the fair market value of the shares issued to Anacor was \$5.79 per share, as compared to the Series A issuance price of \$5.99 per share. We agreed to make further payments to Anacor upon achievement of various development and regulatory milestones and various commercial and sales threshold milestones for an aggregate maximum payment in the low triple-digit millions, and a mid-double digit percentage of royalties received under certain sublicensing arrangements. We also agreed to pay Anacor sales royalties as a percentage of net sales ranging from single to mid-teens. See "Business—License Agreement with Anacor Pharmaceuticals, Inc." for additional information.

We enter into contracts in the normal course of business with third-party contract organizations for preclinical and nonclinical studies and clinical trials, manufacture and supply of our preclinical, nonclinical and clinical trial materials, and other services and products used for operating purposes. These contracts generally provide for termination following a certain period after notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Critical Accounting Policies, Significant Judgements, and Use of Estimates

Our financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the

disclosure of contingent assets and liabilities at the date of the financial statements, and the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgements about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgements and estimates.

Accrued Research and Development

We have entered into various agreements with CMOs and CROs. Our research and development accruals are estimated based on the level of services performed, progress of the studies, including the receipt of deliverables or completion of agreed-upon events, and contracted costs. The estimated costs of research and development services provided, but not yet invoiced, are included in accrued liabilities on the balance sheet. If the actual timing of the performance of services or the level of effort varies from the original estimates, we will adjust the accrual accordingly. Payments made to CMOs and CROs under these arrangements in advance of the performance of the related services are recorded as prepaid expenses until the services are rendered. To date, our estimated accruals have not differed materially from the actual costs.

Stock-Based Compensation

We use a fair value-based method to account for all stock-based compensation arrangements with employees and non-employees, which include stock options. The fair value of the option granted is recognized on a straight-line basis over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period, which usually is the vesting period. We account for forfeitures as they occur. In determining fair value of the stock options granted, we use the Black–Scholes model, which requires the input of subjective assumptions. These assumptions include: estimating the length of time employees will retain their vested stock options before exercising them (expected term), the estimated volatility of our common stock price over the expected term (expected volatility), risk-free interest rate, and expected dividends. Changes in the following assumptions can materially affect the estimate of fair value and ultimately how much stock-based compensation expense is recognized; and the resulting change in fair value, if any, is recognized in our statement of operations and comprehensive loss during the period the related services are rendered. These inputs are subjective and generally require significant analysis and judgment to develop.

- ***Expected Term***—The expected term is calculated using the simplified method which is used when there is insufficient historical data about exercise patterns and post-vesting employment termination behavior. The simplified method is based on the vesting period and the contractual term for each grant, or for each vesting-tranche for awards with graded vesting. The mid-point between the vesting date and the maximum contractual expiration date is used as the expected term under this method. For awards with multiple vesting-tranches, the times from grant until the mid-points for each of the tranches may be averaged to provide an overall expected term.
- ***Expected Volatility***—We use an average historical stock price volatility of a peer group of comparable publicly traded companies in biotechnology and pharmaceutical-related industries to be representative of our expected future stock price volatility, as we do not have any trading history for our common stock. For purposes of identifying these peer companies, we consider the industry, therapeutic area, stage of development, size and financial leverage of potential comparable companies. For each grant, we measure historical volatility over a period equivalent to the expected term.

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- **Expected Dividend Rate**—We have not paid and do not anticipate paying any dividends in the near future. Accordingly, we estimate the dividend yield to be zero.
- **Risk-Free Interest Rate**—The risk-free interest rate is based on the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equivalent to the expected term of the stock award.

Common Stock Valuations

The estimated fair value of the common stock underlying our stock options was determined at each grant date by our board of directors, with input from management. All options to purchase shares of our common stock are intended to be exercisable at a price per share not less than the per-share fair value of our common stock underlying those options on the date of grant.

In the absence of a public trading market for our common stock, on each grant date, we develop an estimate of the fair value of our common stock based on the information known to us on the date of grant, upon a review of any recent events and their potential impact on the estimated fair value per share of the common stock, and valuations from an independent third-party valuation firm.

The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, or the Practice Aid.

The assumptions used to determine the estimated fair value of our common stock are based on numerous objective and subjective factors, combined with management judgment, including:

- external market conditions affecting the pharmaceutical and biotechnology industry and trends within the industry;
- our stage of development and business strategy;
- the rights, preferences and privileges of our redeemable convertible preferred stock relative to those of our common stock;
- the prices at which we sold shares of our redeemable convertible preferred stock;
- our financial condition and operating results, including our levels of available capital resources;
- equity market conditions affecting comparable public companies; and
- general U.S. market conditions and the lack of marketability of our common stock.

The Practice Aid identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, we considered the following methods:

- **Option Pricing Method.** Under the option pricing method, or OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.
- **Probability-Weighted Expected Return Method.** The probability-weighted expected return method, or PWERM, is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

Based on our early stage of development and other relevant factors, we determined that the OPM method was the most appropriate method for allocating our enterprise value to determine the

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estimated fair value of our common stock. In determining the estimated fair value of our common stock, our board of directors also considered the fact that our stockholders could not freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock based on the weighted-average expected time to liquidity. The estimated fair value of our common stock at each grant date reflected a non-marketability discount partially based on the anticipated likelihood and timing of a future liquidity event.

Following the completion of this offering, the fair value of our common stock will be based on the closing quoted market price of our common stock on the date of grant.

Income Taxes

We provide for income taxes under the asset and liability method. Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. Deferred income tax assets and liabilities arise due to differences between when assets or liabilities are recognized for tax purposes and when they are recognized for financial reporting purposes. Net operating losses and credit carryforwards are also deferred tax assets. Deferred tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when such items are expected to reverse. Deferred income tax assets are reduced, as necessary, by a valuation allowance when management determines it is more likely than not that some or all of the tax benefits will not be realized.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination that the position meets the more-likely-than-not threshold and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement.

As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether the factors underlying the more-likely-than-not threshold assertion have changed and the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available. Our policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit. To date, there have been no interest or penalties charged as we had no recorded uncertain tax positions.

Net operating loss carryforwards and tax credit carryforwards are subject to review and possible adjustment by the IRS and may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50 percentage points as defined under Sections 382 and 383 in the Internal Revenue Code, which could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on our value immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. While we do not believe we have experienced ownership changes in the past, it is possible we have done so, and we may experience ownership changes in the future as a result of this offering and/or subsequent shifts in our stock ownership (some of which shifts are outside our control). As a result, even if we attain profitability, we may be limited in our ability to utilize our NOLs and other tax attributes.

Redeemable Convertible Preferred Stock

We record all shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in certain events considered not solely within our control, such as a merger, acquisition, or sale of all or substantially all of our assets (each, a deemed liquidation event), the redeemable convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. In addition, shares of preferred stock must be redeemed by the Company at a price of \$5.99 and \$35.29 for Series A and Series B redeemable convertible stock, respectively, plus any accrued dividends (whether or not declared) in three annual installments on or after the seventh anniversary of the Series B original issue date (on or after March 5, 2028) upon a written request by at least two-thirds of the holders of the Series A and Series B redeemable convertible preferred stock, voting together as a single class. During the years ended December 31, 2019 and 2020, we have accreted \$0.1 million and \$1.0 million, respectively, to the redemption value of the redeemable convertible preferred stock representing cumulative dividends.

Redeemable Convertible Preferred Stock Tranche Liability

The redeemable convertible preferred stock issued in November 2019 contained an embedded feature that provides the investors the ability to participate in a second close of the Series A at the same price upon the attainment of a specific milestone. The obligation to issue additional shares of Series A redeemable convertible preferred stock at a future date was determined to be a freestanding instrument that should be accounted for as a liability. At initial recognition, the Company recorded the redeemable convertible preferred stock tranche liability on the balance sheets at its estimated value. The redeemable convertible preferred stock tranche liability is subject to remeasurement at each subsequent reporting date, with changes in fair value recognized as a component of other expense. Immediately prior to the settlement of the tranche financing occurring in October 2020, the Company remeasured the redeemable convertible preferred stock tranche liability, with the change in fair value recognized as a component of other expense. The redeemable convertible preferred stock tranche liability was then reclassified to the redeemable convertible preferred stock. The estimated fair value of the redeemable convertible preferred stock tranche liability was \$0.3 million at issuance and \$7.1 million at settlement.

Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Indemnification Agreements

We enter into standard indemnification arrangements in the ordinary course of business. Pursuant to these arrangements, we indemnify, hold harmless and agree to reimburse the indemnified parties for losses suffered or incurred by the indemnified party, including in connection with any trade secret, copyright, patent, or other intellectual property infringement claim by any third party with respect to its technology. The term of these indemnification agreements is generally perpetual any time after the execution of the agreement. The maximum potential amount of future payments we could be required to make under these arrangements is not determinable. We have never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, we believe the fair value of these agreements is minimal.

We have also agreed to indemnify our directors and officers for certain events or occurrences while the director or officer is, or was serving, at our request in such capacity. The indemnification period covers all pertinent events and occurrences during the director's or officer's service. The maximum potential amount of future payments we could be required to make under these indemnification agreements is not specified in the agreements; however, we have director and officer insurance coverage that reduces our exposure and enables us to recover a portion of any future amounts paid.

JOBS Act Accounting Election

The JOBS Act permits an “emerging growth company” or “EGC” such as us to delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an EGC or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, the information we provide may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

In addition, we intend to rely on other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act.

We will remain an EGC until the earliest to occur of: (1) the last day of our first fiscal year in which we have total annual revenues of more than \$1.07 billion; (2) the date we qualify as a “large accelerated filer,” with at least \$700.0 million of equity securities held by non-affiliates; (3) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period; and (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

Recent Accounting Pronouncements

See the section titled “Summary of Significant Accounting Policies—Recent Accounting Pronouncements” in Note 2 to our financial statements included elsewhere in this prospectus for additional information.

Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Sensitivity

We are exposed to market risk related to changes in interest rates. We had cash of \$4.1 million as of December 31, 2020, which consisted of cash deposits.

The primary objective of our investment activities is to preserve capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash and investments in accordance with our board-approved investment charter.

Our investments are subject to interest rate risk and could fall in value if market interest rates increase. A hypothetical 10% relative change in interest rates during any of the periods presented would not have had a material impact on our financial statements.

Foreign Currency Risk

A portion of our expenses are denominated in foreign currencies, most notably the Australian Dollar. Future fluctuations in the value of the U.S. Dollar may affect the price we pay for services performed outside the United States.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company developing treatments for rare, chronic, and serious infectious diseases with high unmet needs. Our initial product candidate is epetaborole, a once-daily, oral treatment for patients with chronic non-tuberculous mycobacterial, or NTM, lung disease. Epetaborole has broad spectrum antimycobacterial activity through inhibition of an essential and universal step in bacterial protein synthesis. Its novel mechanism of action is enabled by boron chemistry, our core technology approach. We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the U.S. Food and Drug Administration, or FDA, we believe has the potential to be sufficient for regulatory approval in the United States. Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this trial in [redacted] with topline results anticipated in [redacted]. Based on clinical and preclinical data generated with epetaborole, its novel mechanism of action, and the convenience associated with once-daily, oral dosing, we believe that epetaborole has the potential to become the backbone of a multi-drug treatment regimen for patients suffering from NTM lung disease.

Our core technology approach is based on the use of boron chemistry for our drug research and development initiatives. Boron chemistry has proven to be a highly productive technology leading to the discovery of many promising drugs, particularly focused in infectious diseases. Pioneering work at Anacor Pharmaceuticals, Inc., or Anacor, acquired by Pfizer Inc. in 2015, led to the generation of a class of boron compounds including two FDA-approved therapies, Kerydin and Eucrisa. Our founders consist of former leaders at Anacor, including an inventor of epetaborole and a leading infectious disease expert. We have in-licensed the exclusive worldwide development and commercialization rights for epetaborole from Anacor. We believe our management team's expertise in boron chemistry, infectious diseases, and regulatory approvals will help drive the rapid development and, if approved, the commercialization of novel therapies for infectious diseases.

We are developing oral epetaborole for the treatment of NTM lung disease, a rare, chronic, and progressive infectious disease caused by bacteria known as mycobacteria that lead to irreversible lung damage and can be fatal. Unlike most bacteria, which replicate quickly and spread outside of cells, mycobacteria replicate slowly and mostly infect alveolar (lung) macrophages and survive within them. Due to the slow growth and survival within macrophages of mycobacteria, the current standard of care for NTM lung infections requires prolonged treatments, often for 18 months or longer, with a combination of three or more antibiotics. Initially, we are focused on developing epetaborole to treat the most common type of NTM, *Mycobacterium avium* complex, or MAC, which accounts for approximately 80% of NTM lung disease.

There are an estimated 200,000 patients with NTM lung disease in the United States; however, many remain underdiagnosed due to lack of clinical suspicion, nonspecific respiratory symptoms, and underlying lung diseases that are frequent in patients with this infection. Among the approximately 55,000 patients diagnosed with NTM lung disease in the United States, approximately 44,000 patients have MAC lung disease, and approximately 35% of these patients, or 15,000 patients, have treatment-refractory MAC lung disease.

There is only one approved therapy for treatment-refractory MAC lung disease: Arikayce, an inhaled liposomal formulation of amikacin. In a clinical trial, the addition of Arikayce to standard of care combination antibiotic therapy resulted in the resolution of NTM infection in only 29% of patients, leaving more than 70% of treatment-refractory patients with limited or no treatment options. Furthermore, Arikayce has significant tolerability and safety issues, resulting in a boxed warning for risk of increased respiratory adverse reactions, and other warnings and precautions including ototoxicity, a known class effect with aminoglycosides, and other safety findings. Between 20.3% and 33.5% of

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patients treated with Arikayce in clinical trials discontinued treatment. Despite these shortcomings, Arikayce reported net sales of over \$160 million in the United States in 2020, only its second year on the market. We believe improved treatment of NTM lung disease will require an efficacious, safe, and well-tolerated antibiotic with a novel mechanism of action that is not affected by resistance to existing antibiotics, and that has a convenient, once-daily, oral dose.

Epetraborole is a boron-containing, orally-available, small molecule inhibitor of bacterial leucyl-tRNA synthetase, or LeuRS, an enzyme that catalyzes the attachment of leucine to transfer RNA, or tRNA, molecules, an essential step in protein synthesis. Epetraborole has been administered intravenously or orally to over 200 subjects across six Phase 1 and two truncated Phase 2 clinical trials, where it was generally safe and well-tolerated. Previous results from a Phase 1 clinical trial showed the exposure of epetraborole in alveolar (lung) macrophages, the cells that are infected with mycobacteria in NTM lung disease, was approximately five-fold higher than in plasma. In addition, epetraborole has demonstrated broad antibacterial activity against a panel of 51 isolates of MAC (*M. avium*, *M. intracellulare*, and *M. chimaera*) including against strains that are resistant to antibiotics currently used to treat NTM lung disease.

We are currently conducting a double-blind, placebo-controlled Phase 1b dose-ranging study of epetraborole in healthy volunteers to assess the pharmacokinetics of the molecule at oral doses lower than those previously investigated in prior clinical trials, and in the range of the expected clinical dose, to obtain safety and tolerability data for 28-days of dosing. We anticipate obtaining data in

We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the FDA, we believe has the potential to be sufficient for regulatory approval in the United States. We expect to enroll patients with treatment-refractory MAC lung disease in our planned double-blind, placebo-controlled superiority trial across clinical sites in the United States and Europe. We expect that the primary objective of this planned trial will be to show superiority of epetraborole plus an optimized background regimen, or OBR, consisting of two or more standard of care drugs, compared to placebo, plus an OBR based on a clinically relevant response. We are working with the FDA to finalize the primary endpoint for our planned clinical trial, for which the FDA recommends inclusion of a clinical response measure. We expect that the secondary endpoints will include other microbiological, clinical, and safety measures. Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this trial in with topline results anticipated in

We intend to conduct trials and pursue marketing authorizations with epetraborole in additional geographies outside of the United States and Europe, with an initial focus in Japan. We estimate that there are approximately 220,000 patients with NTM lung disease and approximately 21,000 patients with treatment-refractory MAC lung disease in Japan. We also intend to expand the indications targeted by epetraborole by pursuing development in other mycobacterial diseases, including treatment-naïve NTM lung disease and *Mycobacterium abscessus*, or *M. abscessus*, lung infections. Additionally, we have a strategic partnership with Bii Biosciences Limited, or Bii Biosciences, under which we have licensed out our rights to develop, manufacture, and commercialize epetraborole in China, Hong Kong, Taiwan, and Macau.

The AN2 team has a deep expertise in boron chemistry as exemplified by our management team's history, and we are actively pursuing the identification of additional antimicrobial product candidates that leverage our boron chemistry capabilities. Once identified, we plan to develop these candidates in NTM lung disease and other rare and chronic infectious diseases. We are also selectively evaluating in-licensing opportunities of development-stage candidates that have the potential to address rare and chronic infectious diseases consistent with our corporate strategy.

Our mission is to develop novel therapeutics to treat rare, chronic, and serious infectious diseases in areas of high unmet medical need. As leaders in the field of antimicrobials, we have both an

obligation and a strong desire to combine our drug discovery and development expertise with resources available from public and private organizations to address high unmet needs in global health. To this end, in addition to the treatment of NTM lung disease, we are seeking non-dilutive funding to develop epetraborole for melioidosis and tuberculosis, two diseases that cause significant morbidity and mortality globally.

Our Team

Our team is led by Eric Easom, M.B.A., M.Eng., our co-founder, president, and chief executive officer. Mr. Easom has over 31 years of leadership experience in the biotechnology and pharmaceutical industry, including the last 15 years in infectious disease. He previously led Anacor's research and development efforts in global health. Paul Eckburg, M.D., our chief medical officer, previously served as chief medical officer at a number of other biotechnology companies and was involved in the development of multiple approved antibiotics. Sanjay Chanda, Ph.D., our chief development officer, previously served as chief development officer at Tioma Therapeutics, Inc. and was senior vice president of drug development at Anacor. Lucy Day, our chief financial officer, previously served as chief financial officer at Anacor. Kevin Krause, M.B.A., our chief strategy officer, previously served in various roles at Achaogen, Inc., Cerexa, Inc., and Theravance, Inc. and has deep expertise in antibiotic research, development, and commercialization. Our team also includes George Talbot, M.D., FACP, FIDSA, our co-founder and clinical advisor, Joseph Zakrzewski, our co-founder and chairman of the board of directors, and two inventors of epetraborole, Vincent Hernandez, our vice president of chemistry and Michael R.K. (Dickon) Alley, Ph.D., our head of biology and co-founder.

Our Strategy

We aim to develop a portfolio of therapies to treat rare, chronic, and serious infectious diseases. Key components of our strategy to achieve this goal include:

- **Advance epetraborole through clinical development in NTM lung disease with an initial focus on patients with treatment-refractory MAC lung disease.** We believe that epetraborole has a high potential to bring therapeutic benefit to patients with treatment-refractory MAC lung disease. We have initiated pre-trial activities for our planned Phase 2/3 pivotal clinical trial and, assuming clearance of our planned IND application with the FDA, we anticipate initiating enrollment of patients in this trial in [redacted] with topline results in [redacted]. Based on our discussions with the FDA, we believe this Phase 2/3 pivotal clinical trial has the potential to be sufficient for regulatory approval in the United States and we intend to pursue regulatory approvals in the United States and Europe.
- **Develop epetraborole in additional territories and indications.** The number of cases of NTM lung disease in Japan is among the highest in the world and is estimated to exceed the number of cases in the United States or Europe. Given the high unmet medical need for the treatment of NTM lung disease in this particular geography, we intend to conduct clinical trials and pursue regulatory approval in Japan and more widely in Asia. We believe epetraborole has the potential to meet the ideal target product profile for treatment-naïve NTM lung disease caused by MAC due to its once-daily, oral dosing. In addition, we believe that the broad-spectrum antimycobacterial activity and ideal target product profile demonstrated by epetraborole may allow for the development in other infectious diseases caused by mycobacteria, including *M. abscessus* lung infections. To expand epetraborole's market potential, we intend to pursue development in both of these indications.
- **Build and scale organizational capabilities to support commercialization of epetraborole in NTM lung disease.** We have in-licensed the exclusive worldwide development and commercialization rights for epetraborole, and have licensed out our rights and entered into a strategic partnership with Brie Biosciences in China, Hong Kong, Taiwan, and Macau. We plan

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to build a specialized commercial organization to launch epetraborole in the United States and other key markets, including Japan, if approved. Within certain ex-U.S. and Japan markets, we may consider strategic collaborations for commercialization.

- **Continue to invest in expanding our pipeline of product candidates.** We have several preclinical programs targeting the development of novel antimicrobial compounds based on boron chemistry technology. We anticipate that these compounds will have the potential to be developed in combination with epetraborole for the treatment of NTM lung disease and other rare or chronic infectious diseases. We are also actively pursuing in-licensing of other compounds that are complementary to our strategy.
- **Apply our expertise in antimicrobial drug design and development to other global health problems.** Our leadership team is committed to developing novel therapeutics to treat rare, chronic, and serious infectious diseases in areas of high unmet medical need. We have identified several serious infectious diseases, including melioidosis and tuberculosis, where we believe our technology and global health development expertise has the potential to help deliver therapies to underserved populations. We intend to collaborate with both public and private organizations and foundations and seek non-dilutive capital to advance these global health initiatives.

Our Pipeline

We are initially focused on advancing our initial product candidate, epetraborole, to commercialization in NTM lung disease. We are developing epetraborole to treat the most common type of NTM, MAC, which accounts for approximately 80% of NTM lung disease. We have in-licensed the exclusive worldwide development and commercialization rights for epetraborole. We also have a strategic partnership with Bii Biosciences to develop epetraborole in China, Hong Kong, Taiwan, and Macau. In addition to our development and commercial endeavors in NTM lung disease, we intend to develop epetraborole for several global health initiatives, including those addressing melioidosis and tuberculosis, using non-dilutive funding, which we plan to obtain from sources such as public and private agencies and foundations. The below table summarizes our development plans for epetraborole:

EPETRABOROLE	PRECLINICAL	PHASE 1	PHASE 2	PHASE 2/3
NTM LUNG DISEASE				
Treatment-refractory MAC (U.S. + EU)			<i>Initiate Phase 2/3 pivotal clinical trial in { }</i>	
Treatment-refractory MAC (Japan)			<i>Initiate Japan Phase 1 clinical trial in { }</i>	
Treatment-naïve MAC				
<i>Mycobacterium abscessus</i>				
GLOBAL HEALTH				
Melioidosis (IV formulation)				
Tuberculosis				

Our AN2 Drug Discovery Platform

Boron-Based Chemistry Enables the Targeting of Novel Biological Targets

Our core technology approach is based on the use of boron chemistry for our research and development initiatives. Boron has both a distinctive ability to bind with biological targets through a reversible covalent bond and the potential to address biological targets that have been difficult to inhibit using traditional carbon-based molecules.

Historically, the starting points for small molecule antibiotic drug discovery have been based on natural products or peptides. These molecules typically do not contain boron, which has led to a lack of

focus on boron-based compounds and a reduced understanding of the physical and biological properties of boron, thereby limiting the incorporation of this element into drug products. Additionally, boron-based compounds have been historically difficult to synthesize, but recent advancements in the science and practice of boron-based drug research have allowed for its incorporation in drug discovery efforts. In particular, advanced computational techniques have been developed to improve the understanding of boron and its interaction with key biological targets relevant to drug discovery efforts. Additionally, new tools and methods have been developed to facilitate the creation of novel boron-containing compound families. These unique compound families expand the universe of biological targets that can be addressed by small molecule boron-based compounds.

Boron-based inhibitors typically are highly selective for their biological target, thereby minimizing their potential off-target effects. The ability to modify boron's reactive center, an activity known as tuning, allows drug developers to modulate key properties of the resulting compounds. Properties such as solubility, permeability, molecular charge at different pH values, and metabolic stability, may be designed such that inhibitors can reach any compartment in the body.

Boron chemistry has proven to be a highly productive technology leading to the discovery of many promising drugs, particularly focused in infectious diseases. Pioneering work at Anacor led to the generation of a class of boron compounds known as fused boron heterocyclic compounds that demonstrated greatly improved drug-like properties. This work enabled the discovery of compounds that inhibited aminoacyl target RNA, or tRNA, synthetases in a novel way that is dependent on boron. One of these compounds, tavaborole, targets a fungal aminoacyl tRNA synthetase and is FDA-approved as Kerydin to treat onychomycosis of the toenails. Our lead compound, eptraborole, is a boron-containing analog of tavaborole and is designed to target bacterial leucyl-tRNA synthetase.

Targeting Bacterial Aminoacyl-tRNA Synthetases with Boron Containing Molecules

Aminoacyl-tRNA synthetases, or aaRSs, are enzymes that catalyze an essential step in protein synthesis—the attachment of amino acids to their corresponding tRNAs. These enzymes represent a promising set of targets for the development of new antibiotic drugs because of both their universal presence in bacteria and the significant structural and biochemical differences between bacterial and mammalian enzymes. These species-level differences allow for the design of selective inhibitors of bacterial enzymes that prevent bacterial protein synthesis without interfering with host protein synthesis.

With a few exceptions, each aaRS enzyme recognizes a single amino acid and attaches it to a corresponding tRNA that contains a specific three nucleotide sequence called an anticodon. This anticodon matches one or more corresponding three nucleotide sequences called codons in messenger RNA, or mRNA, that specify the addition of that specific amino acid in a growing protein chain. Each aaRS carries out a multi-step process: recognition of the correct amino acid, reaction of that amino acid with ATP to form a covalent intermediate referred to as an aminoacyl-adenylate, recognition of the tRNA, and reaction of the aminoacyl-adenylate with tRNA resulting in covalent attachment of the aminoacyl group to the tRNA and shutdown of the enzyme. The high fidelity of protein synthesis is maintained by stringent error-proofing functions of aaRS enzymes. This error-proofing takes place at several levels. The first level of specificity is controlled at the steps that involve the recognition of the amino acids and tRNA molecules and their covalent attachment. An additional level of specificity is obtained after the attachment, which in some aaRS enzymes occurs at an independent proof-reading or editing site on the same enzyme. When mismatched aminoacyl-tRNA molecules bind to this site, the aminoacyl group is removed and the tRNA molecule can be recycled.

The aaRS enzymes represent validated antibacterial targets but the properties of previous aaRS inhibitors have often limited their potential, especially inhibitors that target the aminoacylation site as

they are often antagonized by the aaRS's cognant amino acid, thereby limiting their systemic efficacy. In addition, high protein binding and metabolic instability, as exemplified by mupirocin, an isoleucyl-tRNA synthetase inhibitor, can limit these inhibitors' clinical use to topical treatment of staphylococcal and streptococcal skin infections. These hurdles are largely removed by the oxaborole-tRNA trapping, or OBORT, inhibitors. These molecules are non-competitive inhibitors of aminoacylation where the boron molecule effectively recruits tRNA to become part of the inhibitor complex. As shown in Figure 1 below, this property enables a small polar molecule, similar in size to an amino acid, to become a potent enzyme inhibitor.

OBORT (oxaborole tRNA trapping) LeuRS Inhibition

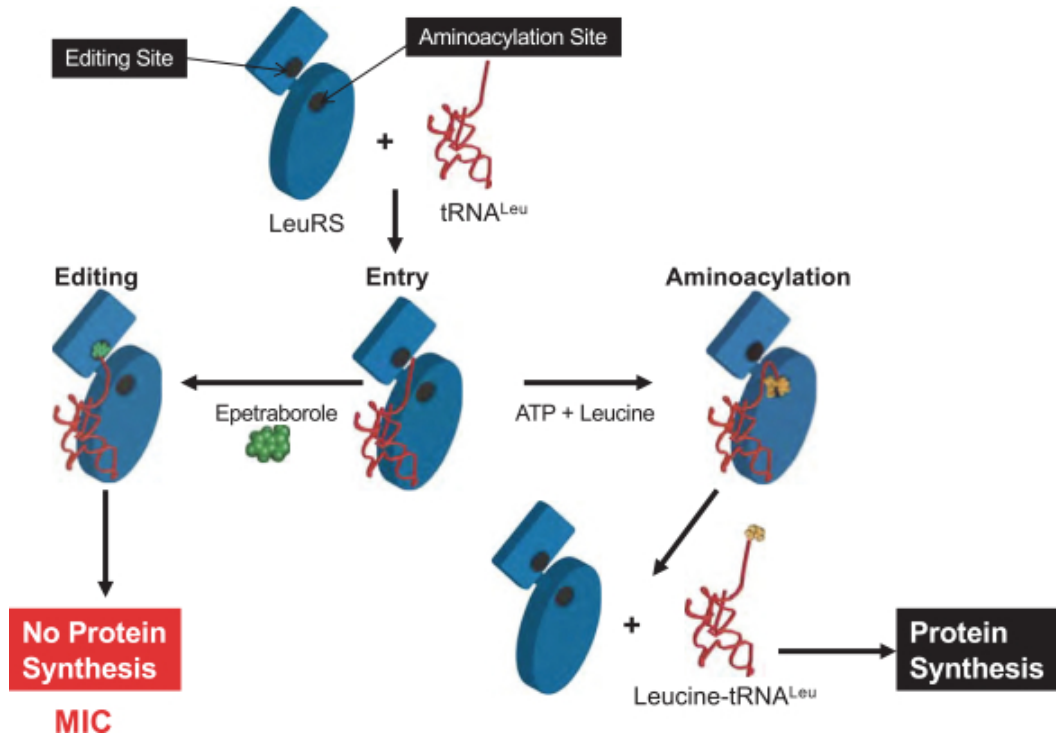


Figure 1. OBORT inhibitor (epetraborole) binds to the terminal adenosine ribose of tRNA^{Leu} trapping it in the editing conformation thus inhibiting tRNA^{Leu} leucylation in the aminoacylation site by leucyl-tRNA synthetase (LeuRS) using ATP+Leucine.

NTM Lung Disease Overview

Background

NTM lung disease is a rare, chronic, and progressive infectious disease caused by bacteria known as mycobacteria that lead to irreversible lung damage and can be fatal. The mycobacteria causing NTM lung disease are ubiquitous environmental organisms in water and soil; however, most people do not become sick when exposed to these bacteria. NTM is not transmitted from person-to-person, unlike infections with other species of mycobacteria, such as *M. tuberculosis*. People with underlying lung conditions such as bronchiectasis, chronic obstructive pulmonary disease; cystic fibrosis; or a weakened immune system are predisposed to developing NTM lung disease, but for many patients it is not understood why they contract the disease.

The most common symptoms in individuals with NTM lung disease are similar to those in other respiratory infections and include cough, fatigue, shortness of breath, coughing up of blood, excessive mucus production, fever, night sweats, loss of appetite, and unintended weight loss. Wheezing and chest pain may also occur. Unlike most other respiratory infections, NTM causes a chronic infection that progresses to fibrosis, permanent lung damage, and respiratory failure. The diagnosis of NTM lung disease is based on a combination of clinical (e.g., pulmonary symptoms), radiographic (e.g., nodular or cavitory findings on chest radiograph), and microbiologic (e.g., positive sputum culture for pathogenic NTM) criteria. Approximately 80% of cases of NTM lung disease are caused by species within MAC (this complex includes *M. avium*, *M. intracellulare*, *M. chimaera*, and other related species). NTM is most common in women and individuals over the age of 65. The five-year mortality rate of patients with NTM lung disease ranges between 10% and 48% across multiple published studies.

There are an estimated 200,000 patients with NTM lung infections in the United States, yet only 55,000 are diagnosed. Underdiagnosis or delayed diagnosis has been identified as a key challenge in the management of NTM lung disease, due to lack of clinical suspicion, nonspecific respiratory symptoms, and underlying lung diseases that are frequent in patients with this infection. Among patients diagnosed with NTM lung disease, approximately 44,000 patients have MAC lung disease and approximately 35% of these patients, or 15,000 patients, have treatment-refractory MAC lung disease.

Current Treatments

Unlike most bacteria, which replicate quickly and spread outside of cells, mycobacteria replicate slowly and mostly infect alveolar (lung) macrophages and survive within them. Due to the slow growth and survival within macrophages of mycobacteria, NTM infections require prolonged treatments, often for 18 months or longer. This extended dosing period increases the potential for antibiotic resistance to develop. Therefore, the first-line treatment for NTM is recommended to be a combination of three antibiotics that have non-overlapping mechanisms of action to reduce the emergence of resistance. A typical initial drug regimen for a patient with treatment-naïve NTM lung infection includes a macrolide such as clarithromycin or azithromycin that inhibits protein synthesis; ethambutol, an inhibitor of mycobacterial cell wall synthesis; and rifamycin, an inhibitor of RNA transcription. Use of these drugs is associated with the risks of developing side effects such as liver toxicity, ocular toxicity, and gastrointestinal intolerance as well as drug-drug interactions. Across multiple studies, treatment-emergent adverse effects occur in up to 70% of patients. As a result of these treatment-emergent adverse events, between 30% and 70% of patients receiving daily antimycobacterial therapy permanently discontinue at least one drug in their regimen.

As outlined in Figure 2 below, the current standard of care combination therapy for treatment-naïve patients is approximately 65% effective as determined by the ability to eliminate mycobacteria from sputum, defined as culture conversion by month six or three consecutive culture conversions measured once per month. Patients that do not culture convert after six months on standard of care treatment are then classified as treatment-refractory. Treatment-refractory patients are treated with increased frequency of dosing (daily vs. thrice weekly) of their previous combination therapies with the potential addition of new agents to the drug combination. The only FDA-approved drug for these patients is Arikayce, an inhaled liposomal formulation of amikacin, an IV-only protein synthesis inhibitor that has been commercially available since the 1970s. Treatment with Arikayce on top of the standard of care combination therapy increased the response rate (culture conversion) at six months to 29% compared to 9% for standard of care alone.

Treatment-Naive Patients 2020 ATS/ETS/ESCMID/IDSA Guidelines recommend triple oral combination therapy, 3 times weekly		
Antimycobacterial Agent	Efficacy	Safety Liabilities
Macrolide (e.g., clarithromycin / azithromycin)	~65% efficacy based on culture conversion by month six	QT prolongation, gastrointestinal (GI) intolerability, increasing resistance
Ethambutol		Optic neuritis, liver tox, peripheral neuropathy
Rifamycin (e.g., rifampin)		Liver tox, drug-drug interactions

Culture + after 6 months of treatment

Treatment-Refractory Patients Intensify guideline-based therapy (e.g., daily) and/or add new agents to combination		
Antimycobacterial Agent	Efficacy	Safety Liabilities
<i>Aminoglycoside</i> • IV amikacin • Inhaled amikacin (e.g., Arikayce)	9% (standard of care) to 29% (Arikayce) efficacy based on culture conversion by month six	<ul style="list-style-type: none"> • IV: Renal toxicity, ototoxicity, indwelling IV • Inhaled: Respiratory toxicity, voice changes, ototoxicity
<i>Unproven oral therapies</i> • Clofazimine • Bedaquiline • Moxifloxacin		<ul style="list-style-type: none"> • Many tolerability issues, including gastrointestinal (GI), QT prolongation, liver tox, drug-drug interactions, blue discoloration of skin • None FDA-approved

Figure 2. Treatment regimen for patients with NTM lung disease

Arikayce is associated with its own side effects including a number of warnings and precautions, adverse reactions, and a boxed warning that states “Arikayce has been associated with a risk of increased respiratory adverse reactions, including hypersensitivity pneumonitis, hemoptysis, bronchospasm, and exacerbation of underlying pulmonary disease that have led to hospitalizations in some cases.” As shown in Table 1 below, ototoxicity, including deafness, dizziness, presyncope, tinnitus, and vertigo, was reported in 17% of patients treated with Arikayce plus standard of care compared to 9.8% of patients treated with standard of care alone. This is a well-described class effect of aminoglycosides, including amikacin. Between 20.3% and 33.5% of patients treated with Arikayce in clinical trials discontinued treatment compared to between 0% and 8% of patients on standard of care alone. Despite these shortcomings, Arikayce reported net sales of over \$160 million in the United States in 2020, only its second year on the market.

<u>Arikayce Pivotal Results Study Parameter</u>	<u>Arikayce</u>	<u>Control</u>
Efficacy		
Culture-converted by month six	29%	9%
Safety		
Withdrawn from study	20%	9%
Upper respiratory adverse events	18%	2%
Ototoxicity	17%	10%

Table 1. Arikayce is associated with a high discontinuation rate and increased adverse events versus standard of care therapy alone.

Given the limitations of current standard of care regimens and Arikayce in treatment-refractory NTM lung disease caused by MAC, we believe that NTM lung disease is an indication with a continued high unmet medical need. NTM lung disease will likely continue to be treated in combination with the current standard of care. Therefore, there is a strong preference for novel antibiotics that can combine

with existing drugs without significantly increasing the rate of adverse reactions. We believe improved treatment of NTM lung disease will require a safe and well-tolerated antibiotic that provides: a novel mechanism of action that is not affected by resistance to existing antibiotics; a convenient, once-daily, oral dose; and additional efficacy.

Our Solution: Epetraborole

We are developing epetraborole, an orally available small molecule inhibitor of bacterial leucyl-tRNA synthetase, or LeuRS, an enzyme involved in bacterial protein synthesis. Based on clinical and preclinical data generated with epetraborole, its novel mechanism of action, and the convenience associated with once-daily, oral dosing, we believe that epetraborole has the potential to become the backbone of a multi-drug treatment regimen for patients suffering from NTM lung disease. Assuming clearance of our planned IND application to the FDA, we anticipate initiating patient enrollment in a Phase 2/3 pivotal clinical trial of epetraborole in treatment-refractory MAC lung disease in [redacted] with topline results anticipated in [redacted]. We also believe epetraborole has the potential to meet the ideal target product profile for treatment-naïve NTM lung disease caused by MAC due to its once-daily, oral dosing. In addition, we believe that the broad antimycobacterial activity demonstrated by epetraborole may allow for its development in other infectious diseases caused by mycobacteria, including *M. abscessus* lung infections. To expand epetraborole's market potential, we intend to pursue development in both of these indications.

Key Attributes of Epetraborole

We believe the development of epetraborole in NTM lung disease represents an attractive opportunity for the following reasons:

- **Large market opportunity.** Treatment-refractory NTM lung disease requires long-term, daily antimycobacterial therapy. There is a high unmet need in NTM lung disease and an attractive opportunity for a safe, tolerable, effective, and oral antibacterial drug that could significantly improve patient outcomes. For example, Arikayce, the only FDA approved therapy for treatment refractory MAC lung disease patients, reported net sales of over \$160 million in the United States in 2020, only its second year on the market, despite a boxed warning for severe respiratory adverse events.
- **Novel mechanism of action with a broad spectrum of antimycobacterial activity.** Epetraborole inhibits bacterial leucyl-tRNA synthetase, a bacterial target with a novel mechanism of action for which there are no approved drugs. Epetraborole has demonstrated broad antimycobacterial activity against MAC, including *M. avium*, *M. intracellulare*, and *M. chimaera*, which is the most common type of NTM that causes human disease (~80% cases) and is the initial focus of epetraborole's clinical development. Furthermore, because epetraborole works through a novel mechanism of action, it is also active against strains that are resistant to other antibiotics currently used to treat NTM lung disease.
- **Substantial pharmacokinetic and safety data package expected to reduce risk in the development program.** Epetraborole has previously been investigated in intravenous and oral formulations in six previous Phase 1 and two truncated Phase 2 clinical trials where it was generally safe and well-tolerated in over 200 subjects. Currently, we are conducting a Phase 1b dose-ranging study in healthy volunteers, in order to assess the pharmacokinetics and safety of oral epetraborole doses relevant for NTM and administered for 28 days. Previously, epetraborole pharmacokinetics, distribution, and metabolism were well characterized using substantially higher doses. Results from a Phase 1 clinical trial showed the exposures of epetraborole in alveolar (lung) macrophages, the cells that are infected with mycobacteria in NTM lung disease, was approximately five-fold higher than in plasma. These results suggest therapeutically relevant exposures of epetraborole may be achieved in these macrophages with orally administered doses that are substantially lower than the maximum tolerated doses

and exposures in previous trials. Furthermore, we have completed extensive toxicology and safety pharmacology studies, including chronic toxicology studies by oral administration, and have successfully manufactured drug substance and drug product in large-scale batches.

- **Convenient once-daily, oral dosing with the aim to serve as the backbone therapy for NTM lung disease.** Epetraborole is an orally available drug intended to be dosed once-daily, thereby providing a convenient addition to standard of care therapy compared to drugs delivered by other methods such as nebulizers (e.g., Arikayce), injections, or intravenous infusions.
- **Compatibility with guideline-based combination treatments.** The current standard of care therapy for NTM lung disease includes administration of three or more antimycobacterial agents, the combination of which improves efficacy, shortens the duration of therapy, and significantly reduces the chance that resistance to individual drugs will develop. Given epetraborole's novel mechanism of action and low potential for drug-drug interactions with existing antibiotics that would limit its ability to be added to standard of care combination regimens, epetraborole, if approved, has the potential to become the backbone of a multi-drug treatment regimen for patients suffering from NTM lung disease.

Mechanism of Action

Epetraborole is a small molecule inhibitor of bacterial LeuRS, an aaRS enzyme, which catalyzes an essential step in protein synthesis. As shown in Figure 3 below, epetraborole forms a complex with a leucyl tRNA molecule, trapping the tRNA molecule in the editing site of the enzyme, which prevents the synthetic site from attaching leucine to tRNA thus shutting down tRNA leucylation and leading to a block in protein synthesis.

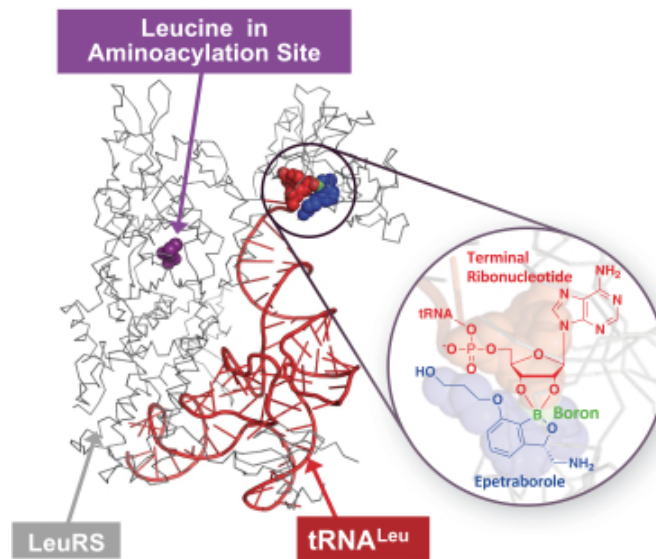


Figure 3. Epetraborole inhibits the protein synthesis enzyme leucyl-tRNA synthetase (LeuRS) by binding to the terminal adenosine ribose of tRNA^{Leu} in the editing site.

Properties of Epetraborole

Broad Antimicrobial Activity

As shown in Table 2 below, epetraborole has demonstrated antimicrobial activity against a broad panel of 51 isolates of MAC, with minimum inhibitory concentrations, or MICs, of 0.25 mg/ml to 8 mg/ml. Because

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epetraborole works via a novel mechanism of action, it also demonstrates potent activity against MAC isolates that are resistant to clarithromycin, a current therapy for NTM treatment regimens.

MIC Range	MIC (mg/L)		
	Epetraborole	Clarithromycin	Amikacin
MIC Range	0.25 - 8	0.25 - >64	8 - >64
MIC ₅₀	2	1	16
MIC ₉₀	8	4	64

Table 2. Antimicrobial activity of epetraborole, clarithromycin and amikacin against 51 isolates of MAC including 17 *M. intracellulare* isolates, 1 *M. avium* isolates, 3 *M. avium* complex isolates, 20 *M. avium* subsp. *hominissuis* isolates, and 10 *M. chimaera* isolates

Epetraborole is Highly Selective for Bacterial LeuRS

Humans have two LeuRS enzymes: a mitochondrial LeuRS and a cytoplasmic LeuRS. Although there is weak sequence similarity between mitochondrial LeuRS and bacterial LeuRS, the human mitochondrial enzyme lacks a functional editing site. Research published by members of our management team found that epetraborole was a poor inhibitor of human cytoplasmic LeuRS, with an IC₅₀ of 185 μM and had virtually no activity against proliferation of a human liver cell line (>500 μM) when compared to the IC₅₀ values of 0.12 and 0.25 μM measured against bacterial forms of the enzyme in *Escherichia coli* and *Klebsiella pneumoniae*, respectively. We believe the mitochondrial LeuRS enzymes lack of an editing function and the weak binding to cytoplasmic LeuRS make epetraborole an attractive candidate as an antibiotic because it suggests that it is not likely to significantly inhibit host protein synthesis at the same drug concentrations that completely inhibit bacterial LeuRS.

Linearity of Epetraborole Pharmacokinetics

Pharmacokinetic data from a prior Phase 1 SAD/MAD clinical trial of epetraborole was used to establish the linear relationship between doses of 200 mg to 4,000 mg per day administered via IV (summarized in Figure 4 below). These results demonstrate the highly linear pharmacokinetic profile of epetraborole. In addition, doses up to 4,000 mg IV per day for 14 days were generally found to be safe and well-tolerated and are at exposures much higher than we believe are needed to treat patients with NTM lung disease. These data, in combination with other available human pharmacokinetic data, were used to establish a population pharmacokinetics model that can predict exposures between doses and subjects due to the pharmacokinetic linearity and substantially low inter-patient variability. We believe these data indicate that expected efficacious exposures can be achieved with our target doses.

Cohort	SAD 1	SAD 2	SAD 3	SAD 4	SAD 5	MAD 1	MAD 2	MAD 3	MAD 4
Dose (mg)	200	400	900	2000	3000	500	750	1200	2000
Frequency	x1	x1	x1	x1	x1	Q12h	Q12h	Q12h	Q12h
Duration (d)	1	1	1	1	1	8	14	14	14
AUC (h.μg/mL)	9.8	19	46	107	145	56	75	117	194
C _{max} (μg/mL)	2.9	5.9	14	32	42	9.4	12	19	31
CL (L/h)	18.0	18.5	17.2	16.5	18.4	15.3	19.4	18.1	18.1
T _{1/2} (h)	10.9	11.3	10.8	11.2	10.4	10.7	10.6	10.5	10.0

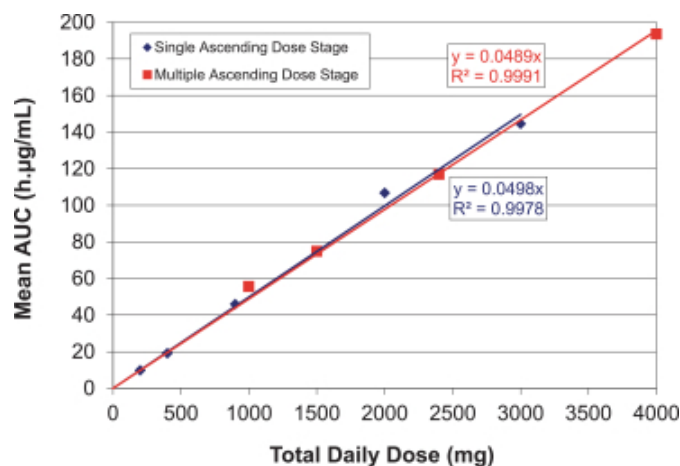


Figure 4. Pharmacokinetic data from a Phase 1 SAD/MAD clinical trial of epetraborole was used to establish the linear relationship between doses of 200 mg to 4,000 mg per day administered via IV.

Preclinical Experience for NTM

In vivo antibacterial activity of epetraborole has been demonstrated in the chronic mouse model of NTM lung disease. In this model, C57BL/6 mice were infected via aerosol with 10^{11} colony forming units, or CFU, per mouse of one of five different isolates of MAC: *M. avium* 2285 (R) (epetraborole MIC = 4 µg/mL); *M. avium* ATCC 700898 (epetraborole MIC = 2 µg/mL); *M. intracellulare* 1956 (epetraborole MIC = 2 µg/mL); *M. intracellulare* DNA00111 (epetraborole MIC = 8 µg/mL); or *M. intracellulare* DNA00055 (epetraborole MIC = 8 µg/mL). The higher MIC values for these isolates allows us to select a dose for our planned Phase 2/3 pivotal clinical trial that is expected to provide potentially efficacious clinical exposures against the full range of epetraborole MIC values (see Table 1). In these models, the infection was allowed to proceed for 28 days before treatment was initiated, which approximates the human disease more closely than shorter mouse models as bacterial growth is largely stationary at initiation of dosing. Starting on day 28, mice were treated daily with orally administered antibacterial therapy for two months, after which the bacteria in lungs were plated on a media plate on day 84 to isolate the bacteria and to determine viable bacteria and CFUs.

Using this chronic mouse model of NTM lung disease and the biofilm forming isolate MAC, *M. avium* 2285 (R), an initial study was conducted using a range of oral doses from 1 to 500 mg/kg daily of epetraborole. This study showed improved antibacterial activity of epetraborole at all doses compared to the daily humanized clarithromycin dose of 250 mg/kg.

As shown in Figure 5 below, treatment with oral doses of 100 mg/kg (which is approximately equivalent to an oral human dose of 250 mg once-daily) reduced counts of viable *M. avium* 2285 (R) by >500-fold, or 2.7- \log_{10} . Doses of 200, 300, and 500 mg/kg (approximately equivalent to oral human doses of 650, 900, and 1500 mg once-daily, respectively) led to reduction in viable *M. avium* 2285(R) by 1,000-fold, or 3- \log_{10} . In addition, the lowest dose studied, 1 mg/kg (approximately equivalent to an oral human dose of 2 mg once-daily) produced a 250-fold, or 2.4- \log_{10} , reduction in viable bacteria, which was significantly better than clarithromycin treated animals at a p-value of 0.0007. No isolates with decreased susceptibility were found in any active epetraborole dosing group.

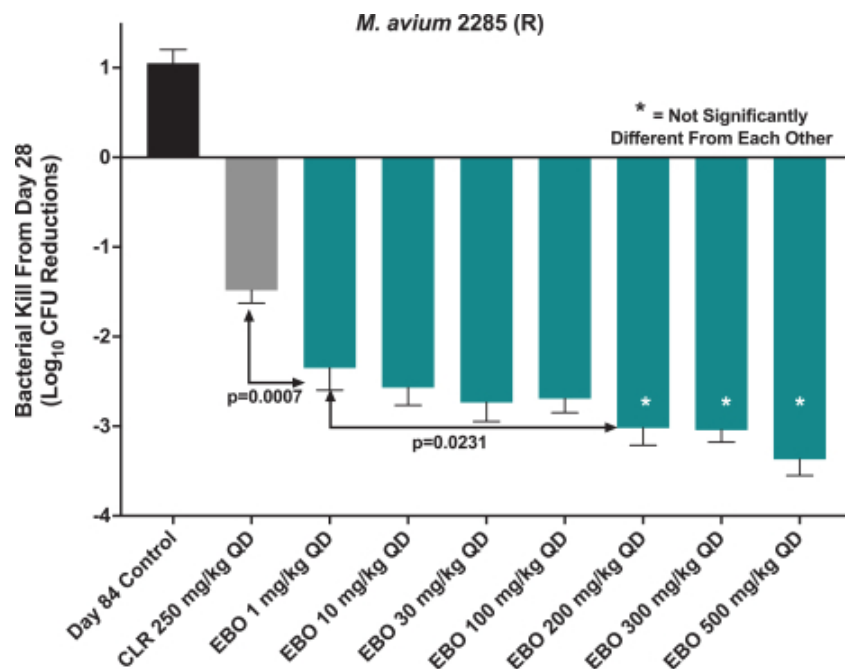


Figure 5. Epetraborole (EBO) and Clarithromycin (CLR) antibacterial activity in a chronic model of NTM lung disease in mice against *M. avium* 2285 (R).

These data were used to design subsequent experiments against the additional four isolates, which evaluated the activity of potential human equivalent doses using 100, 200, or 300 mg/kg epetraborole administered orally once-daily and 400 mg/kg epetraborole administered orally every other day. These active epetraborole treatment groups were compared against an untreated placebo control and the daily oral standard of care combination regimen of 250 mg/kg clarithromycin, 100 mg/kg ethambutol and 100 mg/kg rifabutin. We also tested whether the addition of 200 mg/kg epetraborole on top of standard of care would improve the antibacterial activity of the once-daily standard of care regimen. This approach is consistent with our planned Phase 2/3 pivotal clinical trial.

Figure 6 shows the efficacy data for the other four isolates tested: *M. avium* ATCC 700898; *M. intracellulare* 1956; *M. intracellulare* DNA00111; and *M. intracellulare* DNA00055. A dose response was observed across the range of epetraborole doses studied, with all doses leading to at least a 100-fold, or 2-log₁₀, reduction in viable bacteria for all isolates tested. Although the standard of care regimen led to a range of 1.7- to 4.2-log₁₀ reductions in viable bacteria across the isolates tested, the addition of 200 mg/kg epetraborole (approximately equivalent to a 650 mg oral human equivalent dose based on area under the curve, or AUC, values from a human oral 500 mg dose) led to statistically significant reductions in viable bacterial colonies over the standard of care regimen alone with every strain tested. Reductions in viable bacteria for the standard of care plus epetraborole combination regimens ranged from 40,000 to 400,000-fold, or 4.6- to 5.6-log₁₀, reductions in viable bacteria.

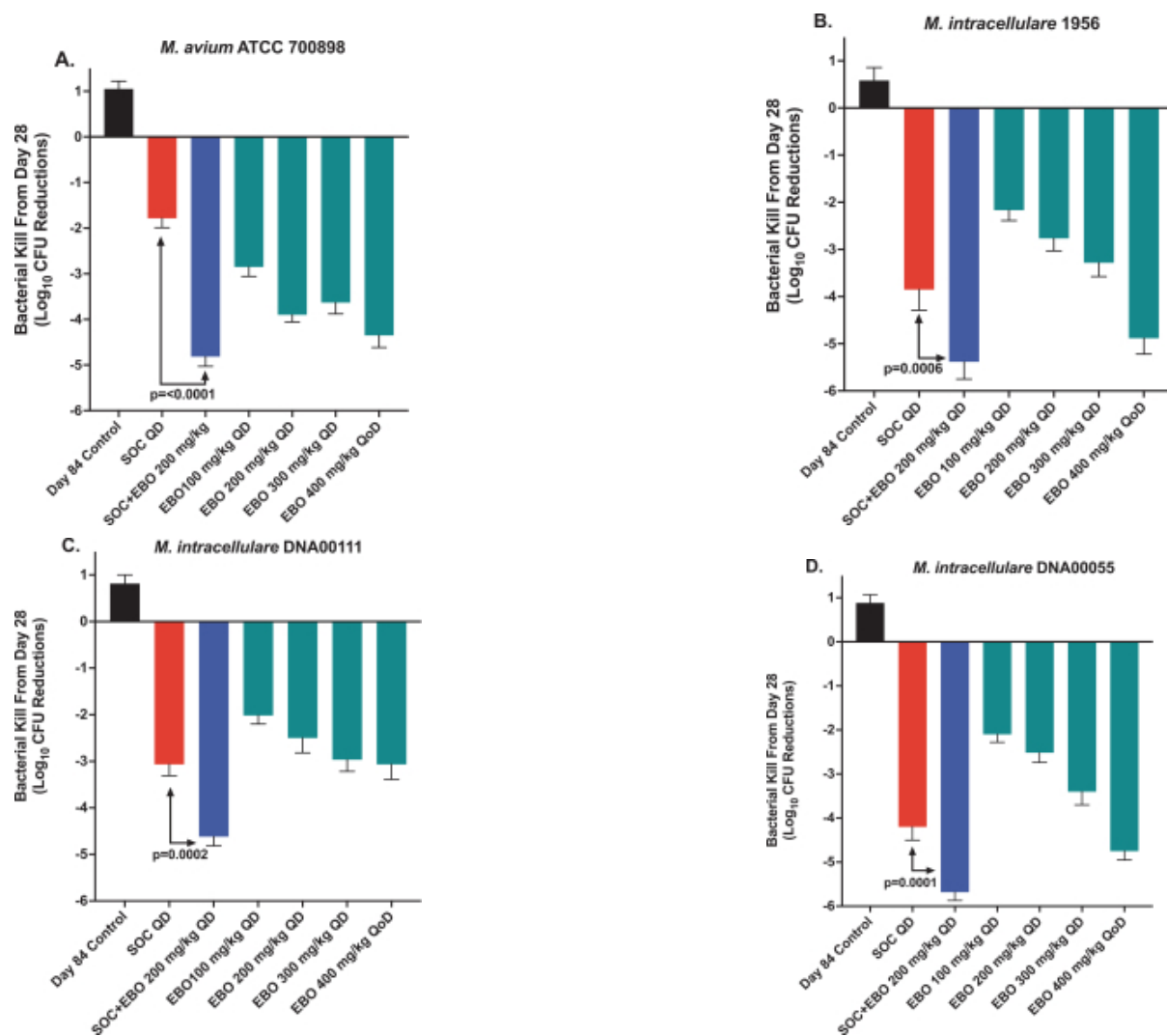


Figure 6. Epetraborole antibacterial activity in a chronic model of NTM lung disease in mice against *M. avium* ATCC 700898 (A), *M. intracellulare* 1956 (B), *M. intracellulare* DNA00111 (C), and *M. intracellulare* DNA00055 (D)

In summary, epetraborole monotherapy showed significant reductions in NTM, in some cases better than the triple-drug regimen. In every case, epetraborole on top of standard of care led to significant reductions in NTM.

Additionally, we assessed epetraborole's antibacterial activity as monotherapy and in combination with standard of care in a hollow-fiber system MAC model, or HFS-MAC. The HFS model is routinely used in antibacterial development to study the pharmacodynamics of drugs using human simulated pharmacokinetics, as a tool for dose selection, and as a means to define drug exposures that lead to and prevent emergence of resistance. The HFS-MAC model is tailored for use against bacteria that reside within macrophages. Specifically, human THP-1 monocytes are infected with MAC and transferred into a hollow fiber system in which cultures could be maintained for periods of 28 days. Bacterial growth media flows through the system and antibacterial drug is titrated in to simulate the

pharmacokinetics of that drug. The infected macrophages are contained within a porous “hollow-fiber” cartridge that retains the macrophages while allowing the growth media and drug to flow through the system. The cartridge contains a sampling port that allows for collection of bacteria over time throughout the experiment. We believe that there are four advantages of this HFS-MAC model to determine human doses to treat NTM lung disease:

- The HFS-MAC model mimics human infections in that MAC resides within human alveolar macrophages, which in this model are THP-1 cells;
- Human drug exposure can be replicated based on fluid flow through the HFS to help determine real-world target exposures in human pharmacokinetic experiments;
- The antibacterial effects of combination therapies can be assessed over a 28-day period; and
- The bacterial burden can be readily and repeatedly assessed to determine the kinetics of antibacterial activity and the rate of emergence of any drug resistant bacteria.

As illustrated in Figure 7 below, the results in this model showed treatment with epetaborole monotherapy led to a rapid 100-fold reduction in viable MAC within five days of treatment initiation. The MAC reduction observed in this study is comparable to the triple-drug standard of care regimen on its own, which is similar to what is seen in the mouse model. This reduction reached a plateau after approximately ten days of dosing, which we believe is due most likely to the emergence of strains of *M. avium* that have developed resistance to epetaborole. This is an expected result that has been observed when all other antimycobacterial agents are used as monotherapy in this model. Treatment with standard of care combination therapy, in this case clarithromycin, rifabutin, and ethambutol, led to decreased bacterial counts compared to epetaborole monotherapy. The addition of epetaborole to the standard of care combination therapy reduced bacterial counts further over the first 21 days of the experiment and no epetaborole resistance was observed.

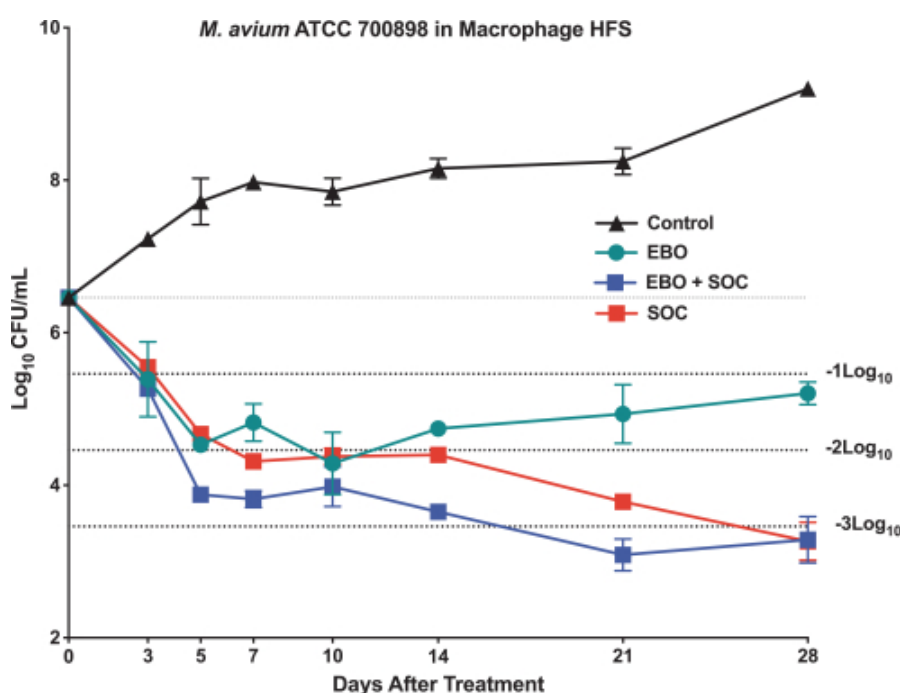


Figure 7. Epetaborole had antibacterial activity both as monotherapy and in combination therapy with a standard of care (clarithromycin, ethambutol, rifabutin) regimen in a HFS-MAC model.

Prior Clinical Experience with Epetraborole

Epetraborole was previously developed by Anacor and licensed by GlaxoSmithKline plc, or GSK, in 2010, where it was originally developed for the acute treatment of complicated urinary tract and intra-abdominal infections. These studies were discontinued by GSK due to clinical resistance seen in a few patients and the molecule was returned to Anacor. Unlike complicated urinary tract infections, or cUTIs, and complicated intra-abdominal infections where monotherapy is standard of care, NTM lung disease is treated with combination therapy per the treatment guidelines of the American Thoracic Society and the Infectious Diseases Society of America to mitigate the development of clinical resistance, which is unavoidable with monotherapy antibiotic treatments. We believe that we can improve the treatment of patients with NTM lung disease with epetraborole as part of a combination therapy to avoid the development of clinical resistance. See “—Rationale for Use of Epetraborole in Treating NTM Lung Disease.” We obtained an exclusive license to epetraborole from Anacor in 2019 and initiated a Phase 1b dose-ranging study to evaluate oral dosing of epetraborole in healthy volunteers in 2021. Over 200 subjects were dosed with epetraborole in one Phase 1 clinical trial conducted by Anacor and five Phase 1 clinical trials and two Phase 2 clinical trials conducted by GSK. We believe the safety, tolerability, and pharmacokinetics data from these prior clinical trials support our future development efforts. Our ongoing Phase 1b dose-ranging study will provide additional safety, tolerability, pharmacokinetics, and food effect data that we believe, together with the data from Anacor and GSK’s prior clinical experience with epetraborole described in Table 3 below, will inform our discussions with the FDA and other regulatory agencies.

Study Title	Patient Population	Epetraborole Formulation	Enrollment	Status
SAD/MAD (Anacor AN3365-PK-101) Phase 1 study to evaluate safety, tolerability, and pharmacokinetics of epetraborole	Healthy volunteers	Intravenous	72 participants total SAD: 40 (30 epetraborole) MAD: 32 (24 epetraborole)	Completed
Intrapulmonary PK (GSK LRS114926) Phase 1 study to evaluate serum and pulmonary pharmacokinetics of epetraborole	Healthy volunteers	Intravenous	30 participants total Single dose: 15 (15 epetraborole) q12h x 3 days: 15 (15 epetraborole)	Completed
Mass balance (GSK LRS115243) Phase 1 study to investigate recovery, excretion, and pharmacokinetics of epetraborole	Healthy volunteers	Intravenous	6 participants total Single dose: 6 (6 epetraborole)	Completed
SAD/MAD and supratherapeutic dose in Japanese subjects (GSK LRS116160) Phase 1 study to evaluate safety, tolerability, and pharmacokinetics of epetraborole	Healthy volunteers	Intravenous	8 participants total Single dose: 8 (8 epetraborole)	Terminated early due to results from study GSK LRS114688 Phase 2 trial

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Study Title	Patient Population	Epetraborole Formulation	Enrollment	Status
Complicated urinary tract infections (GSK LRS114688) Phase 2 study of safety, tolerability, and efficacy of epetraborole compared to imipenem-cilastatin	Patients with acute complicated urinary tract infection and acute pyelonephritis	Intravenous	20 patients total Multiple dose: 20 (14 epetraborole)	Terminated due to microbiological findings of resistance
Complicated intra-abdominal infections (GSK LRS114689) Phase 2 study of safety, tolerability, and preliminary efficacy of epetraborole compared to meropenem	Patients with complicated intra-abdominal infection	Intravenous	15 patients Multiple dose: 15 (9 epetraborole)	Terminated early due to results from study GSK LRS114688 Phase 2 trial
Total enrollment with intravenous formulation: 151 (121 epetraborole)				
SAD/MAD (GSK LRS114470) Phase 1 study to evaluate safety, tolerability, and pharmacokinetics of epetraborole	Healthy volunteers	Oral	77 participants total SAD: 22 (18 epetraborole) MAD: 55 (41 epetraborole)	Terminated early due to tolerability issues at 3,000 mg twice-daily dose level
Food effect (GSK LRS115244) Phase 1 study to investigate relative bioavailability, safety, and tolerability of various oral formulations of epetraborole	Healthy volunteers	Oral	24 participants total Single dose: 24 (24 epetraborole)	Terminated early due to results from study GSK LRS114688 Phase 2 trial
Total enrollment with oral formulation: 101 (83 epetraborole)				
Total enrollment (combined intravenous plus oral formulation): 252 (204 epetraborole)				

Table 3. Summary of prior clinical studies conducted by Anacor and GSK for evaluating epetraborole

SAD/MAD (Anacor AN3365-PK-101)—Phase 1 Study to Evaluate Safety, Tolerability, and Pharmacokinetics of Intravenous Epetraborole

Anacor previously conducted a first-in-human Phase 1 single ascending and multiple ascending dose study to evaluate the safety, pharmacokinetics, and tolerability of intravenous administration of epetraborole (AN3365) in healthy volunteers. The study enrolled 40 participants in a single ascending dose arm, with 30 subjects receiving epetraborole at doses ranging from 200 mg to 3,000 mg, and 32 participants in a multiple ascending dose arm, with 24 subjects receiving epetraborole twice-daily doses ranging from 500 mg to 2,000 mg for 14 days.

In the single ascending dose arm, the study found that following administration as a one-hour infusion, AUC and maximum concentration, or C_{max} , of epetraborole were approximately dose proportional after both single and repeat dosing. Mean $AUC_{0-\infty}$ and C_{max} values after the highest single dose administered (3,000 mg) were 145 $\mu\text{g}\cdot\text{h}/\text{mL}$ and 42 $\mu\text{g}/\text{mL}$. In the multiple ascending dose arm, mean AUC_{0-12} and C_{max} values after the highest repeat dose regimen (2,000 mg) were 97 $\mu\text{g}\cdot\text{h}/\text{mL}$ and 31 $\mu\text{g}/\text{mL}$. No unexpected accumulation was observed after twice-daily dosing for up to 14 days, indicating no time-dependent changes in pharmacokinetics.

Epetraborole was generally well-tolerated in the single and multiple ascending dose arms of the study. There were no deaths, serious adverse events, or SAEs, or any adverse events, or AEs, leading to withdrawal from the study. The three most common AEs reported in the trial were headache, postural hypotension, and cannulation site injury. There was no apparent dose response to these AEs and all were observed in placebo subjects. In both arms of the study, no clinically significant abnormalities were reported in laboratory values after administrations of intravenous epetraborole; however, variable decreases in reticulocyte counts and hemoglobin levels were observed, which were not considered treatment-emergent AEs by the investigator.

Intrapulmonary Pharmacokinetics (GSK LRS114926)—Phase 1 Study to Evaluate Serum and Pulmonary Pharmacokinetics of Intravenous Epetraborole

GSK previously conducted a Phase 1 parallel-cohort study to evaluate the safety, tolerability, and plasma and intrapulmonary pharmacokinetics of intravenous administration of epetraborole (GSK2251052) in healthy volunteers. The study enrolled 15 participants in a single dose cohort of 1,500 mg and 15 participants in a multiple dose arm of 1,500 mg twice-daily for three days.

Results of the study showed that exposures of epetraborole in lung epithelial lining fluid, or ELF, were approximately half those achieved in plasma, but were five times higher in lung macrophages than in plasma. Because lung macrophages are the cells that are infected with MAC, we believe the ability of epetraborole to selectively reach these higher exposures in alveolar macrophages position the treatment of NTM lung disease as an attractive indication for development of epetraborole. Table 4 below summarizes the exposures of epetraborole in plasma, ELF, and alveolar macrophages observed in the study.

Treatment	Visit	N	AUC _(0-t) (ng.h/mL)*		C _{max} (ng/mL)	
			Composite	Plasma Ratio	Composite	Plasma Ratio
Plasma	Day 1	5	29971	NA	5890	NA
	Day 3		55133		8392	
AM	Day 1	5	186116	6.21	33263	5.65
	Day 3		274809	4.98	45939	5.47
ELF	Day 1	5	16133	0.538	3300	0.560
	Day 3		29414	0.534	5009	0.597

* AUC based on concentrations at 2, 6, and 12-hour timepoints.
AM = alveolar macrophages

Table 4. Intravenous dosing of epetraborole led to five times higher levels of the drug in alveolar macrophages than in plasma.

Results in the study indicated that following administration of 1,500 mg epetraborole via IV infusion, epetraborole was eliminated slowly with a median half-life value of 10.7 hours. On average, systemic clearance was low: approximately 23.1 L/h on day one and 20.6 L/h on day three. The fraction of unchanged epetraborole recovered in urine after 48 hours was approximately 26.8% of the total administered dose. The mean steady state volume of distribution, or V_{ss}, (approximately 231 L) exceeded the total body water and total body weight of a 70 kg human, indicating that epetraborole was highly distributed in tissues. In the single dose cohort, epetraborole concentrations in ELF were 53.8% based on composite AUC and, on average, 56.5%, 54.7%, and 47.4% at the 2-, 6-, and 12-h bronchoalveolar lavage, or BAL, sampling points, respectively, relative to the concentrations in plasma. In the multiple dose cohort, the ELF concentrations of epetraborole after multiple twice-daily doses were 53.4% based on composite AUC and, on average, 60.2%, 53.4%, and 43.6% at 2-, 6-, and 12-h, respectively, compared to the concentrations in plasma. In contrast, the epetraborole concentrations in alveolar macrophages relative to those in plasma were 621% based on composite AUC and, on

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average, 573%, 726%, and 544% at the 2-, 6-, and 12-h BAL sampling points, respectively, relative to the concentrations in plasma following a single dose and 498% based on composite AUC and, on average, 549%, 405%, and 566%, at the 2-, 6-, and 12-h BAL sampling points, respectively, relative to the concentrations in plasma following multiple doses.

Overall, intravenous epetaborole was generally well-tolerated, with no SAEs or other AEs leading to withdrawal from the study. The most common drug-related AE was infusion site reactions in six subjects, followed by chest pain, dizziness, and orthostatic hypotension in two subjects or fewer.

Mass Balance (GSK LRS115243)—Phase 1 Study to Investigate Recovery, Excretion, and Pharmacokinetics of Intravenous Epetaborole

GSK previously conducted a Phase 1 mass balance study to evaluate the recovery, excretion and pharmacokinetics of intravenous administration of epetaborole (GSK2251052) in healthy volunteers. The study enrolled six participants in a single dose cohort to receive a single intravenous dose of 1,500 mg of epetaborole containing a small amount of a radioactive radiolabel isotope to follow the absorption, metabolization, and excretion process.

The results indicated that following administration of 1,500 mg epetaborole with the radiolabel via intravenous infusion, radiocarbon was slowly eliminated from plasma with a mean half-life of 96 hours. The mean half-life observed in whole blood was 14.3 hours. Total radioactivity was highly distributed in tissues, based on the mean V_{SS} of radiocarbon in plasma (348 L). The mean $AUC_{0-\infty}$ values for epetaborole and metabolite M3 were 37% and 53% of the radiocarbon $AUC_{0-\infty}$ value observed in plasma, respectively, indicating that the majority of plasma radioactivity is accounted for by the parent epetaborole and the metabolite M3.

Intravenous epetaborole was well-tolerated when administered in this study. Mild treatment-emergent AEs were observed, but none were considered related to epetaborole. There were no severe or serious adverse events or withdrawals from the study drug due to an AE, and no clinically significant changes in vital signs were observed.

SAD/MAD and Supratherapeutic Dose in Japanese Subjects (GSK LRS116160)—Phase 1 Study to Evaluate Safety, Tolerability, and Pharmacokinetics of Epetaborole

GSK previously initiated a Phase 1 study to evaluate the safety, tolerability, and pharmacokinetics of intravenous administration of epetaborole (GSK2251052) in healthy Japanese and Caucasian volunteers. The study was designed to enroll a single ascending dose arm and a multiple ascending dose arm in several genotype groups; however, the first portion was only partially completed before the study was terminated early based on emerging data from the Phase 2 cUTI trial described below. The study enrolled eight Japanese participants receiving epetaborole in single doses of 750 mg or 1,500 mg before early termination of the study. Among the eight subjects enrolled, the plasma pharmacokinetics and tolerability of single doses of intravenous administration of epetaborole were generally consistent with those previously reported in the Anacor Phase 1 study described above.

Intravenous epetaborole was well-tolerated in the study. There were no drug-related AEs or withdrawals from the study drug due to an AE.

Complicated Urinary Tract Infections (GSK LRS114688)—Phase 2 Study of Safety, Tolerability, and Preliminary Efficacy of Epetaborole Compared to Imipenem-Cilastatin

GSK previously initiated a Phase 2 trial to evaluate the safety, tolerability, pharmacokinetics, and efficacy of intravenous administration of epetaborole (GSK2251052) compared to imipenem-cilastatin in adult patients with cUTIs, including acute pyelonephritis. The trial enrolled a total of 20 patients, with six patients treated with epetaborole at a dose of 750 mg, eight patients treated with epetaborole at a dose of 1,500 mg and six patients treated with imipenem-cilastatin.

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After the first 20 patients were enrolled, the trial was terminated early after three urine culture isolates (*E. coli*, *P. mirabilis*, and *K. pneumoniae*) demonstrated a significant increase (32-fold) in epetraborole MIC between baseline and day two. Sequencing analysis of *leuS* from the isolates showed that the baseline isolates were found to have no mutations in *leuS*, and post-baseline isolates were found to contain either single or double editing domain mutations in *leuS*. No other significant changes in the susceptibility of tested comparators were observed.

Emergence of epetraborole resistance was observed in four of 20 subjects enrolled in this Phase 2 cUTI trial, which led GSK to discontinue development of epetraborole for complicated gram-negative bacterial infections and to return the molecule to Anacor. Rifampicin, when studied in a monotherapy cUTI trial, showed similar to greater development of clinical resistance, which was ablated by the addition of another active drug, trimethoprim. In addition, rifampicin has been a frontline agent in treating NTM lung disease and tuberculosis for decades.

Sixteen of 20 patients reported AEs; nausea, increased alanine aminotransferase, and dizziness were the most commonly reported. SAEs of aspiration bronchial, hemoglobin decrease, cardiac arrest, *Escherichia* bacteremia, and pulmonary embolism were observed in three patients treated with epetraborole. The SAEs of hemoglobin decrease and *Escherichia* bacteremia were considered related to epetraborole.

Complicated Intra-Abdominal Infections (GSK LRS114689)—Phase 2 Study of Safety, Tolerability, and Preliminary Efficacy of Intravenous Epetraborole Compared to Meropenem

GSK previously initiated a Phase 2 trial to evaluate the safety, tolerability, pharmacokinetics, and efficacy of intravenous administration of epetraborole (GSK2251052) compared to meropenem in adult patients with complicated intra-abdominal infections. The trial enrolled a total of 14 patients, with five patients treated with epetraborole at a dose of 750 mg, four patients treated with epetraborole at a dose of 1,500 mg and five patients treated with 1,000 mg of meropenem. After the first 14 patients were enrolled, the trial was terminated early because of emergent bacterial resistance in the Phase 2 trial in cUTIs, as described above.

Twelve of 15 subjects reported AEs; diarrhea and pyrexia were the most common AEs reported. Serious adverse events of abdominal abscess, pelvic abscess, blood creatinine increase, hemoglobin decrease, acute pancreatitis, and bile duct stone were observed in three patients treated with epetraborole, although no SAEs were considered related to epetraborole.

SAD/MAD (GSK LRS114470)—Phase 1 Study to Evaluate Safety, Tolerability, and Pharmacokinetics of Oral Epetraborole

GSK previously conducted a Phase 1 dose escalation study to evaluate the safety, tolerability and pharmacokinetics of orally administered epetraborole (GSK2251052) in healthy volunteers. Epetraborole was administered as either tablets or as an oral solution. The study enrolled 22 participants in a single ascending dose arm, with 18 subjects receiving epetraborole at doses ranging from 500 mg to 4,000 mg, and 55 participants in a multiple ascending dose arm, with 41 subjects receiving epetraborole at daily doses ranging from 4,000 mg to 6,000 mg for 10 days as 2,000 mg administered in twice- or thrice-daily dosages.

In the single ascending dose arm, results indicated dose proportionality over the doses used in the study. Following single-dose administration of oral epetraborole as 500 mg, 2,000 mg, and 4,000 mg oral tablets in the fasted state, AUC and C_{max} increased with dose. The half-life was approximately 10 hours. AUC and C_{max} exhibited low to moderate inter-subject variability. In the multiple dose ascending arm, results indicated that oral epetraborole AUC and C_{max} were similar in tablet and solution formulations, while time taken to reach C_{max}, or T_{max}, was slightly earlier for the solution

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formulation. The half-life for oral epetraborole was slightly lower on day one (approximately eight to 11 hours) compared to day 10 (approximately 10 to 12 hours), though the 2,000 mg thrice-daily regimen showed a much longer half-life of approximately 100 hours. In general, oral epetraborole AUC and C_{max} exhibited low to moderate inter-subject variability. Data in the study indicated that steady state for oral epetraborole was generally achieved by day seven for all twice-daily regimens and by day four for thrice-daily regimens. Observed accumulation ranged from 55% to 84% for AUC and 19% to 43% for C_{max} with the largest accumulation observed in the thrice-daily regimen.

In the study, epetraborole was generally well-tolerated with no SAEs and no dose-limiting treatment-emergent AEs at doses up to 4,000 mg/day. Doses up to 2,000 mg twice-daily (4,000 mg/day) were generally well-tolerated; dose-limiting gastrointestinal intolerance was observed when this dose was increased to 3,000 mg twice-daily (6,000 mg/day). The most common drug-related AEs observed were gastrointestinal in nature (nausea and vomiting).

Food effect (GSK LRS115244)—Phase 1 Study to Investigate Relative Bioavailability, Safety, and Tolerability Of Various Oral Formulations of Epetraborole

GSK previously initiated a Phase 1 study to evaluate the relative bioavailability of orally administered epetraborole (GSK2251052) in healthy volunteers, as epetraborole was initially being developed by GSK as an intravenous-to-oral switch regimen for cUTI. The study was originally planned as a five-part study; however, the first portion was only partially completed before the study was terminated early based on emerging data from the Phase 2 cUTI trial described above. The study enrolled 24 participants to evaluate the relative bioavailability of five different oral formulations of 2,000 mg of epetraborole: enteric coated, modified release, powder for oral suspension, immediate release, and oral solution. Before the study was terminated, each subject received several of the five oral formulations of epetraborole.

In the study, epetraborole was generally well tolerated with no SAEs observed.

Rationale for Use of Epetraborole in Treating NTM Lung Disease

We believe that we can effectively treat NTM lung disease with epetraborole while avoiding the development of clinical resistance for several reasons, including:

- Standard of care therapy for NTM lung disease is always a combination therapy with multiple antibiotics, thereby reducing the potential for the development of resistance;
- We have not observed any clinical resistance formation in the chronic model of NTM disease in mice;
- We have demonstrated in a HFS-MAC model the lack of resistance formation when dosed in combination for 21 days;
- Other frontline NTM and tuberculosis drugs have similar or higher frequencies of resistance formation and have been used successfully in clinical practice for decades;
- Epetraborole has been shown in a Phase 1 clinical trial in healthy volunteers to preferentially concentrate in alveolar macrophages, which are the cells infected with mycobacteria in NTM lung disease; and
- Epetraborole has demonstrated bactericidal activity in macrophages.

Based on the lack of dose-limiting treatment-emergent AEs at doses below 3,000 mg twice-daily (6,000 mg/day) in prior studies and trials, we do not anticipate any dose-limiting treatment-emergent adverse effects at our target doses.

Ongoing Phase 1b Dose-Ranging Study

Previous clinical trials of epetraborole were limited to a maximum of 10-14 days of dosing. To support clinical development in NTM lung disease, we are conducting a double-blind, placebo-controlled, Phase 1b dose-ranging study in healthy adult volunteers in Australia to assess the pharmacokinetics and safety of oral 28-day dosing of epetraborole. This study will determine the drug exposures associated with various doses of epetraborole and will be used to update the population pharmacokinetic model used for our planned Phase 2/3 pivotal clinical trial dose selection. Based on the potent in vivo efficacy seen in preclinical mouse models of NTM lung disease and the high drug concentrations observed in a previous Phase 1 clinical trial in lung macrophages, we intend to treat patients with NTM lung disease with oral drug doses that are substantially lower than those previously explored in the clinic (oral daily doses in the range of 250 mg to 1,000 mg, as described in Table 5 below). We anticipate enrolling 56 volunteers in this study with 44 to receive epetraborole. We anticipate results from this study in .

<u>Dose Cohort</u>	<u>Epetraborole Dose (mg)</u>	<u>Active: Placebo</u>	<u>Dosing Frequency (28 Days)</u>
1	250 mg	6:2	q24h
2	500 mg	6:2	q48h
3	500 mg	6:2	q24h
4	750 mg	6:2	q24h
5	1000 mg	6:2	q48h
6	1000 mg	6:2	q24h
7	Food effect	8:0	Single dose

Table 5. Dosing in the 28-day Phase 1b dose-ranging study of epetraborole

Planned Phase 2/3 Pivotal Clinical Trial

We have designed a Phase 2/3 pivotal clinical trial that, based on our discussions with the FDA, we believe has the potential to be sufficient for regulatory approval in the United States. We expect to enroll patients with treatment-refractory MAC lung disease in our planned double-blind, placebo-control superiority trial across clinical sites in the United States and Europe. We expect that the primary objective of this planned trial will be to show superiority of epetaborole plus an optimized background regimen, or OBR, made up of two or more standard of care drugs, compared to placebo plus an OBR based on a clinically relevant response. An overview of the clinical trial design is below in Figure 8. We are working with the FDA to finalize the primary endpoint for our planned clinical trial, for which the FDA recommends inclusion of a clinical response measure. We expect that the secondary endpoints will include other microbiological, clinical, and safety measures. We anticipate dosing of patients who culture convert to continue for an additional twelve months from the first month of culture clearance (three consecutive months of sputum clearance) in accordance to current treatment guidelines in a placebo-controlled blinded extension period of the trial. Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this trial in [redacted] with topline results anticipated in [redacted].

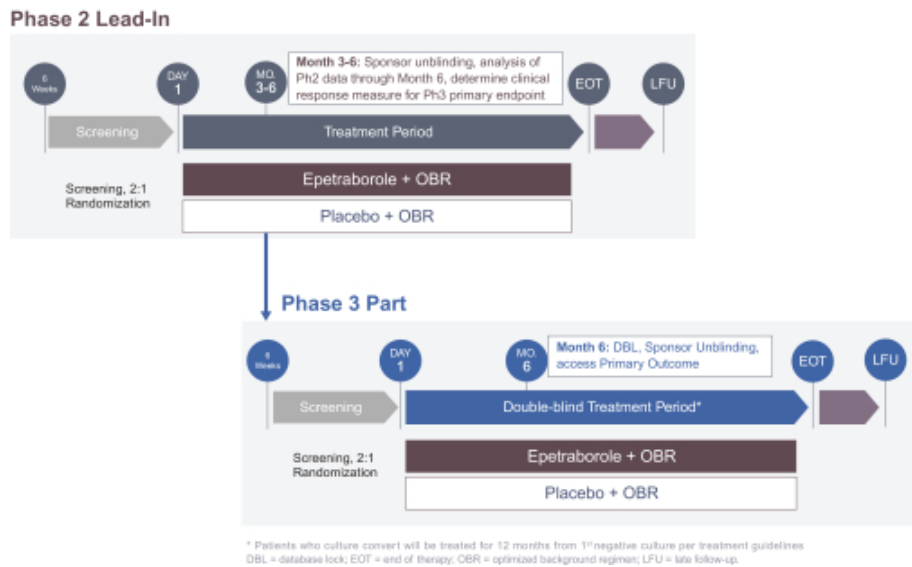


Figure 8. Proposed design of the Phase 2/3 pivotal clinical trial of epetaborole in treatment-refractory MAC lung disease

Planned Phase 1 Renal Impairment Study

Due to the prevalence of renal impairment among patients with NTM lung disease, we expect to initiate a Phase 1 study of epetaborole in subjects with renal impairment prior to the initiation of our planned Phase 2/3 pivotal clinical trial. The objective of the Phase 1 renal impairment study will be to assess safety and pharmacokinetics of oral epetaborole in subjects with varying degrees of renal function (normal to severe). Assuming clearance of our planned IND application to the FDA, we plan to initiate patient enrollment in this renal impairment trial in [redacted] with topline results anticipated in [redacted], which we do not expect will delay the start of our planned Phase 2/3 pivotal clinical trial in patients with NTM lung disease.

Future Development of Epetraborole

We intend to conduct clinical trials in Japan in patients with treatment-refractory MAC lung disease. Japan has some of the highest rates of NTM lung disease in the world. It is believed that these high rates are related to a combination of environmental factors, such as soil and humidity and other climate conditions, behavioral differences, and an aging population. We estimate that there are 220,000 patients with NTM lung disease and 21,000 patients with treatment-refractory MAC lung disease in Japan.

We also intend to conduct trials in which we plan to incorporate epetraborole as part of first line combination treatment of treatment-naïve patients with NTM lung disease. We believe that the addition of epetraborole to first line treatment has the potential to significantly improve response rates without increasing adverse events.

Additionally, we intend to pursue development of epetraborole as a first line therapy in *M. abscessus* lung disease. Many of the current treatments lead to poor efficacy (~50%), are delivered by intravenous infusion, have significant side effects, and lead to the development of multi-drug resistance. We believe that epetraborole, in combination with other drugs, has the potential to treat *M. abscessus* based on its in vitro and in vivo potency against multiple isolates.

Expansion of Our Portfolio of Product Candidates

We have deep expertise in boron chemistry as exemplified by our management team's history of developing epetraborole and we are actively pursuing the identification of additional antimicrobial product candidates that leverage our boron chemistry capabilities. Once identified, we plan to develop these candidates in NTM lung disease and other rare and chronic infectious diseases. We are also selectively evaluating in-licensing opportunities of development-stage candidates addressing rare and chronic infectious diseases consistent with our corporate strategy.

Our Global Health Initiatives

Our leadership team is committed to applying our know-how to help solve some of the toughest infections in global health. Our intent is to fund these efforts primarily through non-dilutive funding from sources such as public and private agencies and foundations. Two of our highest priorities are melioidosis and tuberculosis. We are currently conducting preclinical research with the Mahidol Oxford Tropical Medicine Research Unit in Thailand and Colorado State University for melioidosis and in collaboration with the National Institutes of Health in the United States for tuberculosis.

Melioidosis is an infectious disease caused by the bacterium *Burkholderia pseudomallei*, or *B. pseudomallei*. It is endemic to tropical regions of the world with the majority of cases occurring in South Asia. It is contracted from direct contact with contaminated soil and water and is not transmitted person-to-person. Similar to NTM, *B. pseudomallei* is an intra-cellular pathogen in macrophages. Infections can manifest as localized infections causing pain, swelling and ulceration; as pulmonary infections causing cough, chest pain, high fever, and headache; and as blood stream infections causing fever, headache, respiratory distress, and abdominal discomfort. Current treatment generally starts with an intense phase of intravenous antibiotic treatment for a minimum of two weeks. Even with antibiotic treatment, the mortality rate is between 20% and 40%. Without treatment, six out of ten people die. There are an estimated 165,000 cases of melioidosis diagnosed globally each year. Epetraborole has demonstrated effectiveness in vitro and in vivo mouse models of melioidosis infection.

Tuberculosis is the leading cause of death from a bacterial infectious agent globally. It is caused by infection with *M. tuberculosis*, typically in the lung. Unlike NTM lung disease, tuberculosis is highly contagious and readily spread through the air from person-to-person. Patients with tuberculosis have a cough, pain in the chest, and can cough up blood. Other symptoms include fatigue, weight loss, chills,

and fever. Many individuals have latent infections that develop into symptomatic disease when the immune system is weakened by diseases and conditions such as HIV or other comorbidities such as diabetes. There are approximately 10 million new cases of tuberculosis and approximately 1.4 million deaths globally each year. Two thirds of these cases are in India, Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa. Treatment for tuberculosis requires combination antibiotic therapy, taken for a minimum of six months. Treatment is unsuccessful approximately 20% of the time for drug susceptible cases and 43% of the time for multidrug-resistant cases. Epetraborole has demonstrated potent in vitro activity against *M. tuberculosis*.

We believe that epetraborole has the potential to become an important component of a front-line regimen to increase efficacy and potentially reduce the treatment duration of these diseases in patients. We also believe that epetraborole has the potential to have a significant impact on the global health system. Further research, including clinical trials in the global health setting, will be funded by external mechanisms such as foundation grants that we intend to put in place before launching such trials.

Adjuvant Global Health Agreement

We have entered into an Amended and Restated Global Health Agreement, or the Global Health Agreement, with Adjuvant Global Health Technology Fund L.P. and Adjuvant Global Health Technology Fund DE L.P., or together, Adjuvant, in connection with Adjuvant's investment of \$12.0 million in our Series A and Series B redeemable convertible preferred stock financings. Pursuant to the Global Health Agreement, we agreed to support the creation of innovative and affordable drugs to treat disease, through public health programs and private purchasers in low and low-middle income target countries. Adjuvant's investment supports the development of epetraborole for use in target countries that are melioidosis-endemic, melioidosis-at-risk, tuberculosis-endemic, and tuberculosis-at-risk.

Under the Global Health Agreement, we are required to comply with certain program-related investment global access commitments. We must use reasonably diligent endeavors to develop epetraborole for melioidosis and tuberculosis and any other mutually agreed upon products using non-dilutive funding and we must make them accessible to people in need in target countries on commercially reasonable terms and at a reasonable volume. For instance, we may sell epetraborole for melioidosis and tuberculosis and any other mutually agreed upon products in the target countries at a maximum price of 25% above the cost of sales and we must provide a sufficient volume to meet the demands of non-profit organizations and public-sector purchasers. We are not required to sell any products at a loss. In addition, we are required to develop regulatory strategies and pursue necessary product registrations, as well as actively seek funding from governmental grants and other granting sources, to advance the development of epetraborole for melioidosis and tuberculosis and any other mutually agreed upon products. If we do not maintain compliance with these and other program-related investment commitments under the Global Health Agreement, Adjuvant may be entitled to repayment for any portion of its investment that is not used for the purposes outlined in the Global Health Agreement.

In the event of the assignment, sale, exclusive license, or other transfer of intellectual property related to epetraborole for melioidosis and tuberculosis or any other mutually agreed upon products, we must ensure that the program-related investment global access commitments are expressly assumed by the purchaser, transferee, licensee, or acquirer. Upon the occurrence of certain events, including the failure, by ourselves or any successor to material intellectual property that is subject to program-related investment commitments, to comply with the Global Health Agreement, we must grant Adjuvant a nonexclusive, perpetual, irrevocable, non-terminable, fully-paid up, royalty free license to epetraborole for melioidosis and tuberculosis and any other mutually agreed upon products. Such a license grant will be subject to the licensing terms associated with the Anacor license agreement.

These global access commitments became effective in 2019 at the closing of the Series A redeemable convertible preferred stock financing and will remain in effect until the latter of (i) the date

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that Adjuvant ceases to be a shareholder of our company or (ii) ten years following approval of epetraborole for melioidosis or tuberculosis and any other mutually agreed upon products by a stringent regulatory authority, such as the FDA or EMA.

Manufacturing

We do not own or operate manufacturing facilities for the production of any of our product candidates, nor do we have plans to develop our own manufacturing operations in the foreseeable future. We currently rely on a limited number of third-party contract manufacturers for all of our required raw materials, drug substance, and finished drug product for our preclinical and nonclinical studies and clinical trials. We currently employ internal resources to manage our third-party manufacturing.

Licensing Agreements

License Agreement with Anacor Pharmaceuticals, Inc.

In November 2019, we entered into a license agreement, or the Anacor Agreement, with Anacor, pursuant to which we obtained a worldwide exclusive, sublicensable license under certain patent rights of Anacor and a non-exclusive license under certain know-how of Anacor to use, develop, manufacture, commercialize, or otherwise exploit certain compounds and products, including epetraborole, for the treatment, diagnosis, or prevention of all human diseases, and a worldwide non-exclusive license under certain chiral synthesis intellectual property rights from GSK for the sole purpose of manufacturing such compounds and products.

We granted Anacor a non-exclusive, sublicensable license to develop, manufacture or use (but not commercialize) licensed products under all intellectual property rights that are both (i) related to the licensed products and (ii) conceived or reduced to practice by us, our affiliates, or our sublicensees. We also granted Anacor a right of first refusal in the event a priority review voucher is issued for a licensed product and we desire to sell such priority review voucher.

We are obligated to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize (where such regulatory approval is received) for epetraborole.

In connection with the execution of the Anacor Agreement, we paid to Anacor a non-refundable upfront payment of \$2.0 million and granted Anacor 579,064 shares of Series A redeemable convertible preferred stock. Additionally, we agreed to make further payments to Anacor upon achievement of various development and regulatory milestones and various commercial and sales threshold milestones for an aggregate maximum payment in the low triple-digit millions, and a mid-double digit percentage of royalties received under certain sublicensing arrangements. We also agreed to pay Anacor non-refundable, non-creditable sales royalties on a tiered marginal royalty rate based on the country's status as a developing or developed country as defined in the license agreement. Sales royalties are a percentage of net sales, as specified in the Anacor Agreement, and range from mid-single digit percentages for developing countries and single to mid-teen percentages for developed countries or the China, Hong Kong, Taiwan, and Macau territories. The sales royalties are required to be paid on a product-by-product and country-by-country basis, until the latest to occur of (i) a mid-teen number of years following from the date of first commercial sale of a product in such country, (ii) the expiration of all regulatory or data exclusivity for such product in such country, or (iii) the date of the expiration of the last to expire valid claim of a licensed patent covering such product in such country. In addition, Anacor is entitled to certain milestone payments upon a change of control of our company.

The Anacor Agreement will expire upon expiration of the last to expire royalty term. Either party may terminate the Anacor Agreement for the other party's material breach following a cure period or immediately upon certain insolvency events relating to the other party.

License Agreement with Bii Biosciences Limited

In November 2019, we entered into a license agreement, or the Bii Biosciences License Agreement, pursuant to which we granted Bii Biosciences an exclusive, perpetual, sublicensable license to research, develop, manufacture, and commercialize certain compounds and products, including epetaborole, in China, Hong Kong, Taiwan, and Macau for the diagnosis, treatment, and prevention of diseases, including tuberculosis. Neither party can develop a competing product that is directed to the same target as a licensed compound during the term of the agreement.

The collaboration is overseen by a joint steering committee. In the event of a dispute relating to the determination of proof of concept criteria, or licensed products in China, Hong Kong, Taiwan, and Macau for which Bii Biosciences has delivered a proof of concept acceptance notice, Bii Biosciences has the final decision-making authority, subject to certain veto rights of ours. Upon commencing development, Bii Biosciences is obligated to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one licensed product in China, Hong Kong, Taiwan, and Macau.

We did not receive an upfront payment, but we are eligible to receive a payment in the mid-teen millions in the aggregate for development and regulatory milestones for each licensed product and up to \$150.0 million in the aggregate in commercial milestones upon achieving sales thresholds for each licensed product. We are also entitled to tiered mid-single digit percentage to low-double digit percentage sales-based royalties, subject to certain reductions, including lack of patent coverage and generic product entry.

Intellectual Property

We strive to protect and enhance our proprietary technology, inventions, and improvements that we consider commercially important to the development of our business, including by seeking, maintaining, and defending U.S. and foreign patent rights. We currently do not own any patents or patent applications in any jurisdictions. Our entire patent portfolio is in-licensed and if our current licensors are not cooperative or disagree with us as to the prosecution, maintenance, or enforcement of any such licensed patent rights, such patent rights could be compromised. The patent positions of pharmaceutical companies are generally uncertain and can involve complex legal, scientific, and factual issues. We cannot predict whether any patent applications we may pursue in the future, or any patent applications that we have in-licensed, will issue as patents in any particular jurisdiction, or whether the claims of any issued patents will provide sufficient proprietary protection from competitors.

Our future commercial success depends, in part, on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions, and know-how related to our business, including our product candidates, to defend and enforce our intellectual property rights, in particular our patent rights, to preserve the confidentiality of our trade secrets, and to operate without infringing, misappropriating, or violating the valid and enforceable patents and other intellectual property rights of third parties. Our ability to preclude or restrict third parties from making, using, selling, offering to sell, or importing competing molecules to our products may depend on the extent to which we have rights under valid and enforceable patents and trade secrets that cover these activities. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements with our employees, consultants, and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

In addition, the coverage claimed in a patent application may be significantly reduced before a patent is granted, and its scope can be reinterpreted and even challenged after issuance. As a result, we cannot guarantee that any of our products will be protected or remain protectable by enforceable

patents. Moreover, any patents that we license or may own in the future may be challenged, circumvented, or invalidated by third parties. In addition, because of the extensive time required for clinical development and regulatory review of a product candidate we may develop, it is possible that, before our product candidate can be commercialized successfully, any related patents may expire or remain in force for only a short period following commercial launch, thereby limiting the protection such patent would afford the applicable product and any competitive advantage such patent may provide. For more information regarding the risks related to our intellectual property, please see “Risk Factors—Risks Related to Our Intellectual Property.”

For any individual patent, the term depends on the applicable law in the country in which the patent is issued. In most countries where we have in-licensed patents and patent applications, including the United States, patents have a term of 20 years from the application filing date or earliest claimed nonprovisional priority date. In the United States, the patent term may be shortened if a patent is terminally disclaimed over another patent that expires earlier. The term of a U.S. patent may also be lengthened by a patent term adjustment that is permitted in order to address administrative delays by the U.S. Patent and Trademark Office in examining and granting a patent.

In the United States, the term of a patent that covers an FDA-approved drug or biologic may be eligible for patent term extension in order to restore the period of a patent term lost during the premarket FDA regulatory review process. Specifically, the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the natural expiration of the patent (but the total patent term, including the extension period, must not exceed 14 years following FDA approval). The patent term extension period granted on a patent covering a product is typically one-half the time between the effective date of a clinical investigation involving human beings is begun and the submission date of an application, plus the time between the submission date of an application and the ultimate approval date. Only one patent applicable to an approved product is eligible for patent term extension, and only those claims covering the approved product, a method for using it, or a method for manufacturing it may be extended. The application for patent term extension must be submitted prior to the expiration of the patent. The United States Patent and Trademark Office reviews and approves the application for any Patent Term Extension in consultation with the FDA.

As of July 31, 2021, we exclusively licensed three U.S. patents, 38 foreign patents, one allowed foreign patent application, and approximately five pending foreign patent applications, covering our key programs and pipeline.

The in-licensed patents and patent applications for epetraborole are detailed below. Prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the U.S. Patent and Trademark Office and other patent offices may be significantly revised before issuance, if granted at all.

Epetraborole Product Candidate

The patent portfolio for our epetraborole product candidate is based upon our in-licensed patent portfolio, which includes patents and patent applications directed generally to compositions of matter, pharmaceutical compositions, and methods of treatment. We have two granted patents in the United States, from the in-licensed patent portfolio, covering compositions of matter of a genus of molecules, and the epetraborole product candidate molecule specifically, pharmaceutical compositions, and methods of treating a bacterial-associated or fungal-associated disease. We have granted foreign patents from the in-licensed patent portfolio from Argentina, Armenia, Australia, Azerbaijan, Belgium, Canada, China, Denmark, Finland, France, Germany, Hong Kong, India, Indonesia, Ireland, Israel, Italy, Japan, Kyrgyz Republic, Malaysia, Mexico, Moldova, Netherlands, New Zealand, Norway, Russian Federation, Singapore, South Africa, South Korea, Spain, Sweden, Tajikistan, Turkey, United

Kingdom, Uruguay, and Vietnam. We have an allowed foreign patent application from the in-licensed patent portfolio from South Africa. Patent applications from the in-licensed patent portfolio are pending in Bangladesh, Brazil, Pakistan, Thailand, and Venezuela. Patents and patent applications, if granted, in this family are expected to expire in 2028, without taking potential patent term extensions or patent term adjustment into account.

Trade Secrets

We also rely on trade secrets, know-how, confidential information and continuing technological innovation to develop, strengthen and maintain our proprietary position in our field and protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. However, trade secrets can be difficult to protect. While we take measures to protect and preserve our trade secrets, such measures can be breached, and we may not have adequate remedies for any such breach. We seek to protect our proprietary information, in part, using confidentiality agreements and invention assignment agreements with our collaborators, employees and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. We cannot guarantee, however, that we have executed such agreements with all applicable counterparties. Furthermore, these agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors and other third parties, or misused by any collaborator to whom we disclose such information. To the extent that our collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. For more information regarding the risks related to our intellectual property, please see “Risk Factors—Risks Related to Our Intellectual Property.”

Competition

The biopharmaceutical industry is characterized by intense competition and rapid innovation. Our potential competitors include large pharmaceutical and biotechnology companies, specialty pharmaceutical companies and generic drug companies. Many of our potential competitors have greater financial and technical human resources than we do, as well as greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products, and the commercialization of those products. Accordingly, our potential competitors may be more successful than us in obtaining FDA-approved drugs and achieving widespread market acceptance. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. Finally, the development of new treatment methods for the diseases we are targeting could render our product candidates non-competitive or obsolete.

We believe the key competitive factors that will affect the development and commercial success of our initial product candidate, epetraborole, if approved, will be convenience of oral dosing, efficacy, safety, and tolerability profile, coverage of drug-resistant bacteria strains, lack of cross-resistance, price, and availability of reimbursement from governmental and other third-party payors.

We are currently developing epetraborole for treatment-refractory NTM lung disease caused by MAC isolates. If approved, epetraborole would compete with Insmed’s Arikayce, which is the only currently approved therapy for patients with this condition. Other drugs used to treat these patients include generic drugs such as macrolides (clarithromycin and azithromycin), ethambutol, rifabutin, fluoroquinolones such as levofloxacin, bedaquiline, linezolid, and clofazimine. There are also a number of product candidates in clinical development by third parties that are intended to treat NTM lung disease, including mid- to late-stage product candidates such as SPR720 from Spero Therapeutics, Inc., RHB-204 from Redhill Biopharma Ltd., and omadacycline from Paratek Pharmaceuticals, Inc. We

also expect that epetaborole, if approved, would compete with future and current generic versions of marketed antibiotics.

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state, and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing, and export and import of drug products. A new drug must be approved by the FDA through the New Drug Application, or NDA, process before it may be legally marketed in the United States. We, along with any third-party contractors, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval of our products and product candidates. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Drug Development Process

In the United States, the FDA regulates drugs under the federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing 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. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies, and formulation studies in accordance with FDA's Good Laboratory Practice requirements and other applicable regulations;
- submission to the FDA of an Investigational New Drug application, or IND, which must become effective before human clinical trials may begin;
- approval by an independent Institutional Review Board, or IRB, or ethics committee at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCPs, to establish the safety and efficacy of the proposed drug for its intended use;
- preparation of and 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 application for review;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current Good Manufacturing Practice, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity, and of selected clinical investigation sites to assess compliance with GCPs; and
- FDA review and approval of the NDA to permit commercial marketing of the product for particular indications for use in the United States.

Prior to beginning the first clinical trial with a product candidate in the United States, a sponsor must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available

human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site and must monitor the study until completed. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. Depending on its charter, this group may determine whether a trial may move forward at designated check points based on access to certain data from the trial. The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

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

- **Phase 1:** The product candidate is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- **Phase 2:** The product candidate is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages, and dosing schedule and to identify possible adverse side effects and safety risks. 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 product candidate is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy, and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be conducted after initial marketing approval and may be used to gain additional

experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

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 and 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 product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality, and purity of the final drug. In addition, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

While the IND is active and before approval, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the same or similar drugs, findings from animal or in vitro testing suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

In addition, 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.

U.S. Review and Approval Process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, preclinical, and other nonclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling, and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by independent investigators. 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. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once filed, the FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality, and purity. Under the Prescription Drug User Fee Act, or PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the filing date to complete a standard review of an NDA for a drug that is a new molecular entity, and of ten months from the date of NDA receipt to complete a standard review of an NDA for a drug that is not a new molecular entity.

The FDA may refer an application for a novel drug to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates, and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCPs. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates an NDA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter, or CRL. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A CRL will describe all of the deficiencies that the FDA has identified in the NDA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the CRL without first conducting required inspections and/or reviewing proposed labeling. In issuing the CRL, the FDA may recommend actions that the applicant might take to place the NDA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA with a Risk Evaluation and Mitigation Strategy, or REMS, to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a medicine and to enable patients to have continued access to such medicines by managing their safe use, and 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. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. The FDA may also require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization and may limit further marketing of the product based on the results of these post-marketing studies.

In addition, the Pediatric Research Equity Act, or PREA, requires a sponsor to conduct pediatric clinical trials for most drugs, for a new active ingredient, new indication, new dosage form, new dosing regimen, or new route of administration. Under PREA, original NDAs and supplements must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must evaluate the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric clinical trials for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug is ready for approval for use in adults before pediatric clinical trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric

clinical trials begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying product candidates. For example, the Fast Track program is intended to expedite or facilitate the process for reviewing new products that 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 an NDA is submitted, the product candidate may be eligible for priority review. A Fast Track product may also be eligible for rolling review, where 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.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for Breakthrough Therapy designation to expedite its development and review. A product candidate can receive Breakthrough Therapy designation if preliminary clinical evidence indicates that the product candidate, alone or in combination with one or more other drugs or biologics, 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 all of the Fast Track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers.

Any marketing application for a drug submitted to the FDA for approval, including a product candidate with a Fast Track designation and/or Breakthrough Therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. A product candidate is eligible for priority review if it is designed to treat a serious or life-threatening disease or condition, and if approved, would provide a significant improvement in safety or effectiveness compared to available alternatives for such disease or condition. For new-molecular-entity NDAs, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date, or with respect to non-new-molecular-entity NDAs, within six months of the NDA receipt date.

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive 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 accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies or if such studies 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.

Fast Track designation, Breakthrough Therapy designation, priority review, and accelerated approval do not change the standards for approval, but may expedite the development or approval process. Even if a product candidate 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.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug in the United States will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease 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, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA application user fee.

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. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if a second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Exclusivity

The FDA provides periods of non-patent regulatory exclusivity, which provides the holder of an approved NDA limited protection from new competition in the marketplace for the innovation represented by its approved drug for a period of three or five years following the FDA's approval of the NDA. Five years of exclusivity are available to new chemical entities, or NCEs. An NCE is a drug that contains no active moiety that has been approved by the FDA in any other NDA. An active moiety is the molecule or ion, excluding those appended portions of the molecule that cause the drug to be an ester, salt, including a salt with hydrogen or coordination bonds, or other noncovalent, or not involving the sharing of electron pairs between atoms, derivatives, such as a complex (*i.e.*, formed by the chemical interaction of two compounds), chelate (*i.e.*, a chemical compound), or clathrate (*i.e.*, a polymer framework that traps molecules), of the molecule, responsible for the therapeutic activity of the drug substance. During the exclusivity period, the FDA may not accept for review or approve an

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Abbreviated New Drug Application, or ANDA, or a 505(b)(2) NDA submitted by another company that contains the previously approved active moiety. An ANDA or 505(b)(2) application, however, may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed. If a product is not eligible for the NCE exclusivity, it may be eligible for three years of exclusivity. Three-year exclusivity is available to the holder of an NDA, including a 505(b)(2) NDA, if one or more new clinical trials, other than bioavailability or bioequivalence trials, was essential to the approval of the application and was conducted or sponsored by the applicant. This three-year exclusivity period protects against FDA approval of ANDAs and 505(b)(2) NDAs for the particular condition of the new drug's approval or the change to a marketed product, such as a new formulation for a previously approved drug. Five-year and three-year exclusivity will not delay the submission or approval of a 505(b)(1) NDA; however, an applicant submitting a 505(b)(1) 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 efficacy.

In addition, under the Generating Antibiotic Incentives Now, or GAIN, Act, the FDA may designate a product as a Qualified Infectious Disease Product, or QIDP. In order to receive this designation, a drug must qualify as an antibiotic or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by either (1) an antibiotic or antifungal resistant pathogen, including novel or emerging infectious pathogens, or (2) a so-called "qualifying pathogen" found on a list of potentially dangerous, drug-resistant organisms to established and maintained by the FDA. A sponsor must request such designation before submitting a marketing application. Upon approving a marketing application for a QIDP-designated product, the FDA will extend by an additional five years any non-patent marketing exclusivity period awarded, such as a three-year exclusivity period awarded for new clinical investigations of previously approved products. This extension is in addition to any pediatric exclusivity extension awarded, and the extension will be awarded only to a drug first approved on or after the date of enactment of the GAIN Act. The GAIN Act prohibits the grant of an exclusivity extension where the application is a supplement to an application for which an extension is in effect or has expired, is a subsequent application for a specified change to an approved product, or is an application for a product that does not meet the definition of QIDP based on the uses for which it is ultimately approved.

Post-approval Requirements

Drug products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. 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. Drug manufacturers and their subcontractors 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, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

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

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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 by us 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. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labelling.

Other Healthcare Laws

In the United States, we are subject to a number of federal and state healthcare regulatory laws that restrict business practices in the healthcare industry. These laws include, but are not limited to, federal and state anti-kickback, false claims, and other healthcare fraud and abuse laws, as follows:

The U.S. federal Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving, or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering, or arranging for, or recommending the purchase, lease, or order of any good, facility, item or service reimbursable, in whole or in part, under Medicare, Medicaid, or other federal healthcare programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

The federal false claims, including the civil False Claims Act, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government, knowingly making, using, or causing to

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be made or used a false record or statement material to a false or fraudulent claim to the federal government, or knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government. A claim includes “any request or demand” for money or property presented to the U.S. government. Actions under the civil False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Moreover, a claim including items or services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

In addition, the civil monetary penalties statute, subject to certain exceptions, prohibits, among other things, the offer or transfer of remuneration, including waivers of copayments and deductible amounts (or any part thereof), to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary’s selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program.

HIPAA created additional federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up 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 U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

HIPAA, as amended by HITECH, and their respective implementing regulations, which impose obligations on “covered entities,” including certain healthcare providers, health plans, and healthcare clearinghouses, as well as their respective “business associates” and their respective subcontractors that create, receive, maintain, or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security, and transmission of individually identifiable health information.

The federal Physician Payments Sunshine Act 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, or CMMS, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors), certain other healthcare professionals including physician assistants and nurse practitioners beginning in 2022, and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMMS ownership and investment interests held by physicians and their immediate family members.

Similar state and local laws and regulations may also restrict business practices in the pharmaceutical industry, such as state anti-kickback and false claims laws, which may apply to business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, or by patients themselves; 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 otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing information and marketing expenditures or which require tracking gifts and other remuneration and items of value provided to physicians, other healthcare providers and entities; and state and local laws that require the registration of pharmaceutical sales representatives.

Violations of any of these laws and other applicable healthcare fraud and abuse laws may be punishable by criminal and civil sanctions, including fines and civil monetary penalties, the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid), disgorgement and corporate integrity agreements, which impose, among other things, rigorous operational and monitoring requirements on companies. Similar sanctions and penalties, as well as imprisonment, also can be imposed upon executive officers and employees of such companies.

Coverage and Reimbursement

Sales of any pharmaceutical product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. In the United States, no uniform policy exists for coverage and reimbursement for pharmaceutical products among third-party payors. Therefore, decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. The process for determining whether a third-party payor will provide coverage for a product typically is separate from the process for setting the price of such product or for establishing the reimbursement rate that the payor will pay for the product once coverage is approved.

Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication, or place products at certain formulary levels that result in lower reimbursement levels and higher cost-sharing obligation imposed on patients. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service and the level of coverage and reimbursement can differ significantly from payor to payor. As a result, the coverage determination process will often require us to provide scientific and clinical support for the use of our products to each payor separately and can be a time-consuming process, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Additionally, a third-party payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved.

Moreover, as a condition of participating in, and having products covered under, certain federal healthcare programs, such as Medicare and Medicaid, we are subject to federal laws and regulations that require pharmaceutical manufacturers to calculate and report certain price reporting metrics to the government, such as Medicaid Average Manufacturer Price, or AMP, and Best Price, Medicare Average Sales Price, the 340B Ceiling Price, and Non-Federal AMP reported to the Department of Veteran Affairs, and with respect to Medicaid, pay statutory rebates on utilization of manufacturers' products by Medicaid beneficiaries. Compliance with such laws and regulations require significant resources and any findings of non-compliance may have a material adverse effect on our revenues.

Healthcare Reform

In the United States and certain foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system. In the U.S., by way of example, in March 2010, the ACA was signed into law, which substantially changed the way healthcare is financed by both governmental and private insurers in the United States and significantly affected the pharmaceutical industry. The ACA, among other things, increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs; required collection of rebates for drugs paid by Medicaid managed care organizations; required manufacturers to participate in a coverage gap discount program, under which they must agree to offer point-of-sale discounts (increased to 70 percent, effective as of January 1, 2019) off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; imposed a non-deductible annual fee on

pharmaceutical manufacturers or importers who sell certain “branded prescription drugs” to specified federal government programs, implemented a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected expanded the types of entities eligible for the 340B drug discount program; expanded eligibility criteria for Medicaid programs; created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and established a Center for Medicare Innovation at CMMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial, administrative, executive, and Congressional legislative challenges to certain aspects of the ACA. For example, on June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling, President Biden issued an executive order that initiated a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that the Affordable Care Act will be subject to judicial or Congressional challenges in the future. It is unclear how such challenges and the healthcare reform measures of the Biden administration will impact the ACA.

Other legislative changes have been proposed and adopted since the ACA was enacted, including aggregate reductions of Medicare payments to providers of 2% per fiscal year, which was temporarily suspended from May 1, 2020 through December 31, 2021, and reduced payments to several types of Medicare providers. Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted legislation designed, among other things, to bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for pharmaceutical products. By way of example, the American Taxpayer Relief Act of 2021, effective January 1, 2024, would eliminate the statutory cap on rebate amounts owed by drug manufacturers under the Medicaid Drug Rebate Program, or MDRP, which is currently capped at 100% of the AMP for a covered outpatient drug. Further, based on a recent executive order, the Biden administration expressed its intent to pursue certain policy initiatives to reduce drug prices.

Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures and, in some cases, mechanisms to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine which drugs and suppliers will be included in their healthcare programs. Furthermore, there has been increased interest by third party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

We expect additional state and federal healthcare reform measures to be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure.

Data Privacy and Security Laws

Numerous state, federal and foreign laws, including consumer protection laws and regulations, govern the collection, dissemination, use, access to, confidentiality, and security of personal information, including health-related information. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws, including Health Insurance Portability and Accountability Act, or HIPAA, and federal and state consumer protection laws and regulations (e.g., Section 5 of the Federal Trade Commission 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. In addition, certain state and non-U.S. laws, such as the California Consumer Privacy Act, or CCPA, the California Privacy Rights Act, or CPRA, and the General Data Protection Regulation, or GDPR, govern the privacy and security of personal information, including health-related information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to make compliance efforts more challenging, and can result in investigations, proceedings, or actions that lead to significant penalties and restrictions on data processing.

Employees and Human Capital Resources

As of August 31, 2021, we had 16 full-time employees, consisting of clinical, research, development, manufacturing, regulatory, finance, and operational personnel. Seven of our employees hold Ph.D. or M.D. degrees. None of our employees is subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

We recognize that our continued ability to attract, retain, and motivate exceptional employees is vital to ensuring our long-term competitive advantage. Our employees are critical to our long-term success and are essential to helping us meet our goals. Among other things, we support and incentivize our employees in the following ways:

- **Talent development, compensation, and retention:** We strive to provide our employees with a rewarding work environment, including the opportunity for growth, success, and professional development. We provide a competitive compensation and benefits package, including bonus and equity incentive plans, a 401(k) plan—all designed to attract and retain a skilled and diverse workforce.
- **Health and safety:** We support the health and safety of our employees by providing comprehensive insurance benefits, an employee assistance program, company-paid holidays, a personal time-off program, and other additional benefits which are intended to assist employees to manage their well-being.
- **Inclusion and diversity:** We are committed to efforts to increase diversity and foster an inclusive work environment that supports our workforce.

Facilities

Our current corporate headquarters are located in Menlo Park, California, where we lease approximately 1,731 square feet of office space pursuant to a lease agreement that commenced in May 2021 and expires in August 2022. We leased approximately 2,500 additional square feet of adjacent office space pursuant to a lease agreement that commenced in September 2021 and expires in August 2022.

We believe that these existing facilities will be adequate for our near-term needs. If required, we believe that suitable additional or alternative space would be available in the future on commercially reasonable terms.

COVID-19 Impact on Facilities

We have implemented policies that enable our employees to work remotely, and such policies may continue for an indefinite period. We have also implemented various safety protocols for all on-site personnel, including the requirements to wear masks, suspend all non-essential travel for our employees, and maintain social distance. We continue to evaluate our protocols and practices as the global response to the COVID-19 pandemic continues to evolve. While we are partially operating virtually to align with local COVID-19 guidelines, we believe our operational needs are being met for the time being. To date, we have not experienced any material impact on our ability to operate our business. We plan to periodically reassess the impact of COVID-19 on our facility needs.

Legal Proceedings

From time to time, we may become involved in material legal proceedings or be subject to claims arising in the ordinary course of our business. We are currently not party to any legal proceedings material to our operations or of which any of our property is the subject, nor are we aware of any such proceedings that are contemplated by a government authority.

Regardless of outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources, and other factors, and there can be no assurances that favorable outcomes will be obtained.

MANAGEMENT

Executive Officers, Management, and Directors

The following table sets forth information regarding our executive officers and directors as of August 31, 2021.

Name	Age	Position
<i>Executive Officers:</i>		
Eric Easom	54	Chief Executive Officer and Director
Lucy Day	62	Chief Financial Officer
Sanjay Chanda, Ph.D.	56	Chief Development Officer
Paul Eckburg, M.D.	51	Chief Medical Officer
Kevin Krause	47	Chief Strategy Officer
<i>Non-Employee Directors:</i>		
Joseph Zakrzewski	58	Chair and Director
Kabeer Aziz	31	Director
Gilbert Lynn Marks, M.D.	64	Director
Patricia Martin	60	Director
Rob Readnour, Ph.D.	57	Director
Stephanie Wong	47	Director

Executive Officers

Eric Easom has served as our President and Chief Executive Officer and a member of our board of directors since November 2019. From February 2009 to June 2017, Mr. Easom served as Vice President, Neglected Diseases at Anacor Pharmaceuticals Inc., or Anacor, a publicly traded biopharmaceutical company that was acquired by Pfizer Inc. From July 2007 to January 2009, Mr. Easom served as the Senior Director, Business Development and Marketing at InteKrin Therapeutics, Inc., a biopharmaceutical company. From April 2006 to July 2007, he served as the Director of Marketing at MedImmune, a biotechnology company that was acquired by AstraZeneca. Mr. Easom currently serves as a member of the board of directors of the Chagas Disease Foundation and Resilient Biotics and is an advisor for the California Life Sciences Institute. Mr. Easom received a B.S. and Masters in Electrical Engineering from the University of Louisville and an M.B.A. from Indiana University, Kelley School of Business. We believe that Mr. Easom's extensive work in high-growth biotechnology and pharmaceutical companies makes him an appropriate member of our board of directors.

Lucy Day has served as our Chief Financial Officer since November 2019. From March 2002 to August 2016, Ms. Day served in various financial and administrative roles, including as the initial CFO, Vice President of Finance, and Vice President, Human Resources and Finance at Anacor. From February 1994 to January 2002, Ms. Day served in various financial roles at Centaur Pharmaceuticals, Inc. a biopharmaceutical company, including as chief financial officer. Ms. Day has previous experience at Bank of America, Sohio Petroleum Company, and Ernst and Young LLP. Ms. Day received a B.A. in Political Economies from the University of California, Berkeley and is a CPA (inactive) in California.

Sanjay Chanda, Ph.D., has served as our Chief Development Officer since November 2019. Since October 2017, Dr. Chanda has provided expert advice related to drug development through Sanjay Chanda Consulting Services. Since February 2017, Dr. Chanda has been serving as the Chief Development Officer at Cortene Inc., a biopharmaceutical company. Since January 2014, Dr. Chanda has also served as the Co-Founder and Development Consultant at Auration Biotech, a pharmaceutical

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company. From October 2016 to August 2017, he served as the Chief Development Officer of Tioma Therapeutics, an immune-oncology company. From January 2008 to October 2016, Dr. Chandra served as the Senior Vice President of Drug Development of Anacor. Dr. Chanda received a Ph.D. in Pharmacology/Toxicology from Northeast Louisiana University and an M. Pharmacy and B. Pharmacy from Birla Institute of Technology, Mesra, India.

Paul Eckburg, M.D., has served as our Chief Medical Officer since November 2019, initially as a 50% consultant and as a full-time employee as of April 30, 2021. Since 2000, he has been the owner of Eckburg Medical Consulting, a consulting company involved in anti-infective biopharmaceutical development. Since August 2019, Dr. Eckburg served as an interim Chief Medical Officer and subsequent expert scientific advisor at SNIPR Biome, a CRISPR microbiome company. Since June 2016, he served as an interim Chief Medical Officer and subsequent scientific advisory board member at Bugworks Research Inc., a biopharmaceutical company. Since July 2016, he has served as a consultant at Spero Therapeutics, a biopharmaceutical company. Since February 2015, Dr. Eckburg has served as a consultant and Safety Monitoring Board member at Paratek Pharmaceuticals, a biopharmaceutical company. Since February 2015, he has served as a scientific advisory board member for Cūrza, a biopharmaceutical company. From February 2018 to May 2019, he served as acting Chief Medical Officer at UTILITY therapeutics, a biotechnology company. From April 2017 to May 2019, Dr. Eckburg served as the acting Vice President of Clinical Development at Recida Therapeutics, a biopharmaceutical company. From April 2016 to May 2019, he served as the acting Chief Medical Officer at Geom Therapeutics, a biopharmaceutical company. From March 2016 to July 2018, Dr. Eckburg served as the acting Chief Medical Officer at Zavante Therapeutics, Inc., a biopharmaceutical company, and continued as a consultant at Nabriva Therapeutics plc, a biopharmaceutical company, from June 2018 to June 2019. From September 2015 to January 2018, he served as the acting Chief Medical Officer at Nexgen Biosciences, a biopharmaceutical company. From September 2013 to April 2017, Dr. Eckburg served as a consultant at MicuRx Pharmaceuticals, Inc., a biopharmaceutical company. From November 2012 to April 2016, he served as an ID Consultant at Genentech, a biotechnology company. Dr. Eckburg received an M.D. from Rush University and a B.S. in Cell and Structural Biology from the University of Illinois at Urbana-Champaign. He completed both an Internal Medicine residency and Infectious Diseases fellowship at Stanford University School of Medicine, where he continues to teach as an Adjunct Clinical Assistant Professor.

Kevin Krause has served as our Chief Strategy Officer since August 2021. He was previously our Vice President of Clinical Sciences and Development Operations since November 2019. From January 2015 to June 2019, Mr. Krause served multiple roles at Achaogen, including the position of Director of Microbiology, Senior Director, Head of Microbiology, and Senior Director of Corporate Development. From August 2010 to December 2014, Mr. Krause was a member of the Clinical Microbiology team at Cerexa, Inc. and played a key role on the Scientific Assessment teams for all antibacterial and antiviral in-licensing opportunities. Prior to that, Mr. Krause worked at Theravance, Inc. from March 1999 to July 2010 in various research and clinical microbiology roles. Mr. Krause received an M.B.A. from the University of California, Berkeley Haas School of Business and a B.S. in Molecular Biology from San Francisco State University.

Non-Employee Directors

Joseph Zakrzewski has served as a member of our board of directors since May 2017. Mr. Zakrzewski currently serves as the Chairman of the board of directors of Cerecin, a biopharmaceutical company and Cyteir Therapeutics, a publicly traded biotechnology company. Mr. Zakrzewski also currently serves as a member of the board of directors of Sangamo Therapeutics, Inc., a publicly traded biotechnology company, Acceleron Pharma, a publicly traded biotechnology company, and Amarin Corporation, a publicly traded biopharmaceutical company. From 2014 to 2020, Mr. Zakrzewski served as a

member of the board of directors of Site One Therapeutics, a pharmaceutical company. From December 2009 to December 2013, Mr. Zakrzewski also served as the Chairman and Chief Executive Officer of Amarin Corporation, a publicly traded biopharmaceutical company. Mr. Zakrzewski received a B.S. in Chemical Engineering from Drexel University, an M.S. in Biochemical Engineering from Drexel University, and an M.B.A. in Finance from Indiana University. We believe that Mr. Zakrzewski's over 25 years of experience as an executive in the biotechnology and pharmaceutical industry makes him an appropriate member of our board of directors.

Kabeer Aziz has served as a member of our board of directors since November 2019. In October 2018, Mr. Aziz co-founded Adjuvant Capital, a life sciences investment fund focused on global public health, and currently serves as a Principal and is responsible for sourcing, executing, and managing investments primarily focused on vaccines and therapeutics for infectious disease. Mr. Aziz currently serves as a member of the board of directors of MinervaX, Pulmocide, Quantoom Biosciences and Frontier Nutrition and is a board observer to YishengBio. From October 2015 to September 2018, Mr. Aziz was a Senior Associate at the Global Health Investment Fund, a healthcare focused impact fund. Prior to this, Mr. Aziz was an Investment Associate at Metalmark Capital from July 2013 to September 2015 as well as an Analyst at Greenhill & Co. from June 2011 to June 2013. Mr. Aziz received a B.S. in Finance and Economics from the Stern School of Business at New York University. We believe that Mr. Aziz's work in the infectious disease space and experience in healthcare finance makes him an appropriate member of our board of directors.

Gilbert Lynn Marks, M.D., has served as a member of our board of directors since February 2020. From September 2017 to September 2021, Dr. Marks was employed by Tunnell Government Services, or TGS, and became a Vice President in January 2020 at TGS, a subsidiary of Tunnell Consulting, Inc. that supports clients in medical product development. As an employee of TGS, he served as a contractor supporting the Office of the Director for the Biomedical Advanced Research and Development Authority, or BARDA, a U.S. Department of Health and Human Services office responsible for the procurement and development of medical countermeasures for chemical, biological radiological, nuclear, and pandemic threats, including COVID-19. From 2016 to 2021, Dr. Marks served as a member of the Advisory Committee for the National Center for Advancing Translational Sciences, or NCATS, an institute at the National Institutes of Health. As part of his support for NCATS, he also served as Chair of the Cures Acceleration Network Review Board. From 2006 to 2018, Dr. Marks served on the Scientific Advisory Board for the TB Alliance, a not-for-profit organization, including serving as Chair. Since 2020, he has served on the Scientific Review Board for the Medicines for Malaria Venture, a not-for-profit organization and has agreed to Chair the Committee starting in 2022. Since 2009, he has served on the Scientific Advisory Committee for the Polio Antiviral Initiative. Since 2017, Dr. Marks has served as a member of the Board of Directors for WOAR, Philadelphia, Pennsylvania's not for profit rape crisis support center. From 1993 to 2017, Dr. Marks served in multiple roles at GlaxoSmithKline plc, a publicly traded pharmaceutical company, including serving as Senior Vice President in Research & Development and as a member of the Pharmaceuticals R&D Leadership team. He also served as Senior Clinical Advisor for Infectious Diseases. Dr. Marks received a B.S. in Chemistry from Auburn University and an M.D. from University of South Alabama College of Medicine. He is Board Certified in Internal Medicine and Infectious Diseases. We believe that Dr. Marks' over 30 years of experience in the field of infectious diseases and as a senior executive in the pharmaceutical industry makes him an appropriate member of our board of directors.

Patricia (Patty) Martin has served as a member of our board of directors since April 2021. Since July 2019, Ms. Martin has served as the President and Chief Executive Office of BioCrossroads, a company that supports and promotes the life sciences industry in the state of Indiana. Since July 2019, Ms. Martin has also served as the Managing Partner of BC Initiative, a company that supports seed fund investing in life sciences. From June 1991 to June 2017, Ms. Martin held multiple positions at Eli Lilly and Company, a publicly traded pharmaceutical company, including Chief Operations Officer of

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Lilly Diabetes, Chief Diversity Officer and Chief Alliance Officer. Ms. Martin currently also serves as a member of the board of directors of CareSource, Inc., Flame Biosciences, Inc., Indiana Biosciences Research Institute, Indiana Health Information Exchange, Indiana University Foundation, Indiana University Research & Technology Corporation, Regenstrief Institute, and Christian Theological Seminary. Ms. Martin received a B.S. in Accounting from the Kelley School of Business at Indiana University and an M.B.A. from Harvard Business School. We believe that Ms. Martin's 25 years of experience as an executive at biopharmaceutical companies makes her an appropriate member of our board of directors.

Rob Readnour, Ph.D., has served as a member of our board of directors since November 2019. Since July 2018, Dr. Readnour has served as the Managing Director at Mountain Group Partners, a venture capital firm that invests in early-stage companies in the life science, agricultural technology, and technology sectors. From October 1990 to June 2018, Dr. Readnour served in multiple senior management positions at Elanco Animal Health, a publicly traded pharmaceutical company that was previously part of Eli Lilly & Co, including Senior Director of Product Development and Senior Advisor and Chief Scientific Officer at Elanco Alternative Innovation. Dr. Readnour currently serves as a member of the board of or has visitation rights to Targan, a bio-systems company focused on animal health, Advanced Animal Diagnostics, an animal health device company, Skyline Vet Pharma, a veterinary pharmaceutical company, Exubriion Therapeutics, a radiotherapeutic veterinary device company, Appello Pharmaceuticals, a drug development company, and NuSirt, a drug and nutraceutical compound development company. Dr. Readnour also currently serves as the Executive Chairman of In the Bowl Animal Health, an animal health company. Dr. Readnour is also the Chief Executive Officer of Borah, an animal health discovery company. Dr. Readnour received a Ph.D. in Analytical Chemistry from University of Illinois and a B.S. in Chemistry from Southeast Missouri State University. We believe that Dr. Readnour's more than 30 years of experience moving products from discovery through commercialization makes him an appropriate member of our board of directors.

Stephanie Wong has served as a member of our board of directors since April 2021. Ms. Wong has served as the Chief Financial Officer at Calithera Biosciences, a publicly traded biopharmaceutical company, since January 2021, and as Secretary since January 2017. Ms. Wong previously served in various roles at Calithera, as Senior Vice President, Finance from January 2018 to December 2020 and as Vice President, Finance from April 2014 to December 2017. Since December 2016, she has also served as a member of the board of directors of the Northern California Chapter of The Association of Bioscience Financial Officers, an association for financial executives working in the bioscience industry. From 2009 to 2013, Ms. Wong was at SciClone Pharmaceuticals, a publicly traded pharmaceutical company, most recently as Vice President, Finance and Controller. Prior to that, Ms. Wong served in senior finance roles at AcclRx Pharmaceuticals and Kosan Biosciences, and as an audit manager at PricewaterhouseCoopers. Ms. Wong received a B.S. in Business Administration from the University of California, Berkeley and is a Certified Public Accountant (inactive) in the state of California. We believe that Ms. Wong's extensive work in high-growth, publicly traded biopharmaceutical companies makes her an appropriate member of our board of directors.

Composition of Our Board of Directors

Our business and affairs are organized under the direction of our board of directors, which currently consists of seven members. The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling, and direction to our management. Our board of directors meets on a regular basis and additionally as required.

Certain members of our board of directors were elected under the provisions of our Amended and Restated Voting Agreement entered into in March 2021, or the Voting Agreement, which will terminate upon the closing of this offering. Under the terms of our Voting Agreement, the stockholders who are party to the Voting Agreement have agreed to vote their respective shares to elect: (i) one director designated by MGC Venture Partners 2018 LP, currently Rob Readnour; (ii) one director designated by

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Adjuvant Global Health Technology Fund L.P., currently Kabeer Aziz; (iii) one director who shall be our then-current Chief Executive Officer, currently Eric Easom; (iv) one director elected by the holders of a majority of the shares of our common stock, currently Joseph Zakrzewski; and (v) three directors who are not our employees or affiliates, with such individuals to be designated by mutual agreement of our board of directors, currently Gilbert Marks, Patricia Martin, and Stephanie Wong. The Voting Agreement will terminate upon the closing of this offering, and upon the closing of the offering no stockholder will have any special rights regarding the election or designation of the members of our board of directors. Our current directors elected to our board of directors pursuant to the Voting Agreement will continue to serve as directors until their successors are duly elected and qualified by holders of our common stock.

Our board of directors may establish the authorized number of directors from time to time by resolution. In accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- the Class I directors will be _____, _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2022;
- the Class II directors will be _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2023; and
- the Class III directors will be _____ and _____, 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 Nasdaq Listing Rules independent directors must comprise a majority of our board of directors as a listed company within one year of the listing date.

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning her or his background, employment and affiliations, including family relationships, our board of directors has determined that none of our directors, other than Mr. Easom, has any relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is “independent” as that term is defined under the Nasdaq Listing Rules. Our board of directors has determined that Mr. Easom, by virtue of his position as our Chief Executive Officer, is not independent under applicable rules and regulations of the SEC and the Nasdaq Listing Rules. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our shares by each non-employee director and the transactions described in the section titled “Certain Relationships and Related Person Transactions.”

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Each committee intends to adopt a written charter that satisfies the application rules and regulation of the SEC and the Nasdaq Listing Rules, which we will post to our website at www.an2therapeutics.com upon the closing of this offering. Our board of directors may establish other committees as it deems necessary or appropriate from time to time.

Audit Committee

Our audit committee currently consists of Stephanie Wong, Kabeer Azia, and Rob Readnour, each of whom our board of directors has determined satisfies the independence requirements under the Nasdaq Listing Rules and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee is Stephanie Wong, who our board of directors has determined is an “audit committee financial expert” within the meaning of SEC regulations. Each member of our audit committee can read and understand fundamental financial statements in accordance with applicable requirements. In arriving at these determinations, the board of directors has examined each audit committee member’s scope of experience and the nature of their employment in the corporate finance sector.

The primary purpose of the audit committee is to discharge the responsibilities of our board of directors with respect to our corporate accounting and financial reporting processes, systems of internal control and financial-statement audits, and to oversee our independent registered accounting firm. Specific responsibilities of our audit committee include:

- helping our board of directors oversee our corporate accounting and financial reporting processes;
- managing the selection, engagement, qualifications, independence, and performance of a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing related person transactions;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes our internal quality control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving, or, as permitted, pre-approving, audit and permissible non-audit services to be performed by the independent registered public accounting firm.

Compensation Committee

Our compensation committee currently consists of Patricia Martin, Joseph Zakrzewski, and Gilbert Marks. The chair of our compensation committee is Patricia Martin. Our board of directors has determined that each member of our compensation committee is independent under the Nasdaq Listing Rules and as a “non-employee director” as defined in Rule 16b-3 promulgated under the Exchange Act.

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The primary purpose of our compensation committee is to discharge the responsibilities of our board of directors in overseeing our compensation policies, plans and programs, and to review and determine the compensation to be paid to our executive officers, directors and other senior management, as appropriate. Specific responsibilities of our compensation committee include:

- reviewing and approving the compensation of our chief executive officer, other executive officers, and senior management;
- reviewing and recommending to our board of directors the compensation paid to our directors;
- reviewing and approving the compensation arrangements with our executive officers and other senior management;
- administering our equity incentive plans and other benefit programs;
- reviewing, adopting, amending, and terminating, incentive compensation and equity plans, severance agreements, profit sharing plans, bonus plans, change-of-control protections, and any other compensatory arrangements for our executive officers and other senior management;
- reviewing, evaluating, and recommending to our board of directors succession plans for our executive officers; and
- reviewing and establishing general policies relating to compensation and benefits of our employees, including our overall compensation strategy, including base salary, incentive compensation, and equity-based grants, to assure that it promotes stockholder interests and supports our strategic and tactical objectives, and that it provides for appropriate rewards and incentives for our management and employees.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of _____, _____ and _____. The chair of our nominating and corporate governance committee is _____. Our board of directors has determined that each member of the nominating and corporate governance committee is independent under the Nasdaq Listing Rules, a non-employee director, and free from any relationship that would interfere with the exercise of his or her independent judgment.

Specific responsibilities of our nominating and corporate governance committee include:

- identifying and evaluating candidates, including the nomination of incumbent directors for reelection and nominees recommended by stockholders, to serve on our board of directors;
- considering and making recommendations to our board of directors regarding the composition and chairmanship of the committees of our board of directors;
- instituting plans or programs for the continuing education of our board of directors and orientation of new directors;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- overseeing periodic evaluations of the board of directors' performance, including committees of the board of directors and management.

Code of Business Conduct and Ethics

In connection with this offering, we intend to adopt a written Code of Business Conduct and Ethics that applies to all our employees, officers, and directors. This includes our principal executive officer, principal financial officer, and principal accounting officer or controller, or persons performing similar functions. The full text of our Code of Business Conduct and Ethics will be posted on our website at www.an2therapeutics.com. We intend to disclose on our website any future amendments of our Code

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of Business Conduct and Ethics or waivers that exempt any principal executive officer, principal financial officer, principal accounting officer or controller, persons performing similar functions, or our directors from provisions in the Code of Business Conduct and Ethics. Information contained on, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only an inactive textual reference.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is currently, or has been at any time, one of our executive officers or employees. None of our executive officers currently serves, or has served during the last calendar year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Non-Employee Director Compensation

During the year ended December 31, 2020, each of the following individuals served on our board of directors as non-employee directors: Kabeer Aziz, Gilbert Marks, Rob Readnour, and Joseph Zakrzewski.

The following table presents all of the compensation awarded to or earned by or paid to our named non-employee directors during the fiscal year ended December 31, 2020.

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Total (\$)</u>
Gilbert Marks, M.D.(2)	25,000	6,940	31,940

- (1) All of the option awards were granted under the 2017 Plan, the terms of which plan are described below under "Executive Compensation—Equity Benefit Plans—2017 Equity Incentive Plan." The amounts shown represent the grant date fair values of option awards granted in 2020 as computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) Topic 718. See Note 2 to our financial statements included elsewhere in this prospectus for a discussion of the assumption used in the calculation.
- (2) During the year ended December 31, 2020, Dr. Marks was granted 9,703 options to purchase common stock. These options vest over 48 months, subject to Dr. Marks' continued service with us through each vesting date. All options are exercisable. As of December 31, 2020, 9,703 options were not vested.

Messrs. Aziz and Zakrzewski and Dr. Readnour also served on our board of directors during the year ended December 31, 2020 but did not receive any compensation for their service as directors. Mr. Easom also served on our board of directors during the year ended December 31, 2020 but did not receive any additional compensation for his service as a director. See the section titled "Executive Compensation" for more information regarding the compensation earned by Mr. Easom.

We have reimbursed and will continue to reimburse all of our non-employee directors for their reasonable out-of-pocket expenses incurred in attending board of directors and committee meetings.

We intend to adopt a non-employee director compensation policy, pursuant to which our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors, to be effective following the completion of this offering.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2020 were:

- Eric Easom, our Chief Executive Officer;
- Lucy Day, our Chief Financial Officer; and
- Sanjay Chanda, our Chief Development Officer.

Summary Compensation Table

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

Name and Principal Position	Year	Salary (\$)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)	Total (\$)
Eric Easom <i>President and Chief Executive Officer</i>	2020	340,000	–	122,400	–	462,400
Lucy Day(3) <i>Chief Financial Officer</i>	2020	83,917	19,558	50,000	–	153,475
Sanjay Chanda, Ph.D. <i>Chief Development Officer</i>	2020	310,000	28,022	83,700	–	421,722

- (1) Amounts reflect the full grant-date fair value of stock options granted during 2020 computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) Topic 718, rather than the amounts paid to or realized by the named individual. See Note 2 to our financial statements included elsewhere in this prospectus for a discussion of the assumption used in the calculation. All of the option awards were granted under the 2017 Plan, the terms of which plan are described below under “Executive Compensation—Equity Benefit Plans—2017 Equity Incentive Plan.”
- (2) Amounts represent the annual performance-based cash bonuses earned by our named executive officers based on the achievement of certain corporate performance objectives during 2020. The target bonus amounts for Mr. Easom, Ms. Day, and Dr. Chanda were \$136,000, \$54,000, and \$93,000, respectively. In December of 2020, our board of directors assessed company performance against our 2020 corporate goals and based on such performance, awarded a cash annual incentive bonus to each of our named executive officers equal to 90% of his or her target bonus amount for 2020. Ms. Day was additionally awarded a discretionary bonus of \$34,895. These amounts were paid to the named executive officers in early 2021.
- (3) Ms. Day commenced part-time employment with us in 2019 on a 25% basis. She commenced full-time employment with us on December 1, 2020.

Outstanding Equity Awards as of December 31, 2020

The following table presents the outstanding equity incentive plan awards held by each named executive officer as of December 31, 2020.

Name	Grant Date	Option Awards ⁽¹⁾				Stock Awards	
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price Per Share (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Eric Easom	2/24/2017 ⁽²⁾	—	—	—	—	—	—
Lucy Day	1/23/2020 ⁽³⁾	6,153	9,393	0.99	1/22/2030	—	—
	10/5/2020 ⁽⁴⁾	156	3,600	0.99	9/23/2030	—	—
	12/9/2020 ⁽⁵⁾	—	9,600	0.99	1/22/2030	—	—
Sanjay Chanda, Ph.D.	1/23/2020 ⁽⁶⁾	13,537	20,664	0.99	1/22/2030	—	—
	10/5/2020 ⁽⁷⁾	344	7,920	0.99	9/23/2030	—	—

- (1) All of the option awards were granted under the 2017 Plan, the terms of which plan are described below under “Executive Compensation—Equity Benefit Plans—2017 Equity Incentive Plan.”
- (2) Mr. Easom acquired 550,000 shares of our common stock pursuant to a common stock purchase agreement. As of December 31, 2020, all shares were vested.
- (3) The option vests in respect of 25% of the underlying shares on the first anniversary of the vesting commencement date, with the remaining 75% of the underlying shares vesting on a monthly basis thereafter, subject to Ms. Day’s continued service with us through each vesting date. As of December 31, 2020, 6,153 shares were vested and 9,393 shares were not vested. The option is subject to the vesting acceleration provision described below under “—Potential Payments upon Termination or Change in Control.”
- (4) The option vests in respect of 1/48th of the underlying shares shall vest on each monthly anniversary of the vesting commencement date, subject to Ms. Day’s continued service with us through each vesting date. All options are exercisable. As of December 31, 2020, 156 shares were vested and 3,600 shares were not vested. The option is subject to the vesting acceleration provision described below under “—Potential Payments upon Termination or Change in Control.”
- (5) The option vests in respect of 1/48th of the underlying shares shall vest on each monthly anniversary of the vesting commencement date, subject to Ms. Day’s continued service with us through each vesting date. As of December 31, 2020, 9,600 shares were not vested. The option is subject to the vesting acceleration provision described below under “—Potential Payments upon Termination or Change in Control.”
- (6) The option vests in respect of 25% of the underlying shares on the first anniversary of the vesting commencement date, with the remaining 75% of the underlying shares vesting on a monthly basis thereafter, subject to Dr. Chanda’s continued service with us through each vesting date. As of December 31, 2020, 13,537 shares were vested and 20,664 shares were not vested. The option is subject to the vesting acceleration provision described below under “—Potential Payments upon Termination or Change in Control.”
- (7) The option vests in respect of 1/48th of the underlying shares shall vest on each monthly anniversary of the vesting commencement date, subject to Dr. Chanda’s continued service with us through each vesting date. As of December 31, 2020, 344 shares were vested and 7,920 shares were not vested. The option is subject to the vesting acceleration provision described below under “—Potential Payments upon Termination or Change in Control.”

Emerging Growth Company Status

We are an “emerging growth company,” as defined in the JOBS Act. As an emerging growth company we will be exempt from certain requirements related to executive compensation, including the requirements to hold a nonbinding advisory vote on executive compensation and to provide information relating to the ratio of total compensation of our chief executive officer to the median of the annual total compensation of all of our employees, each as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Pension Benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during the fiscal year ended December 31, 2020.

Nonqualified Deferred Compensation

Our named executive officers did not participate in, or earn any benefits under, a non-qualified deferred compensation plan sponsored by us during the fiscal year ended December 31, 2020.

Offer Letters

Below are descriptions of our offer letters with our named executive officers. The offer letters with our executive officers generally provide for at-will employment and set forth the executive officer’s initial base salary, annual target bonus, and eligibility to participate in our employee benefit plans.

Eric Easom

On November 19, 2019, Eric Easom entered into an employment agreement with us to serve as our President and Chief Executive Officer on an at-will basis. Pursuant to Mr. Easom’s employment agreement, Mr. Easom’s initial base salary was \$340,000. Currently, his annual base salary is \$390,000, and he is eligible for an annual target bonus of 40% of his base salary.

Mr. Easom is entitled to certain equity acceleration benefits in the event of an employment termination in certain circumstances, which are described below under “—Potential Payments upon Termination or Change in Control.”

Lucy Day

On November 19, 2019, Lucy Day entered into an employment agreement with us to serve as our Chief Financial Officer on an at-will basis. Pursuant to Ms. Day’s employment agreement, Ms. Day’s initial base salary was \$67,000 for her services working on a 25% basis, increasing up to 100% as the Company’s requirements for her services increased. Currently, her annual base salary is \$311,800, and she is eligible for an annual target bonus of 30% of her base salary. In connection with her employment, Ms. Day was granted an initial first option award to purchase 15,546 shares of our common stock, 25% of which vest on the one-year anniversary of the vesting commencement date, and the remainder vesting on a monthly basis thereafter, a second option award to purchase 3,756 shares of our common stock, 1/48th of which vest on a monthly basis, and a third option award to purchase 9,600 shares of our common stock, 1/48th of which vest on a monthly basis.

Ms. Day is entitled to certain equity acceleration benefits in the event of an employment termination in certain circumstances, which are described below under “—Potential Payments upon Termination or Change in Control.”

Sanjay Chanda

On November 19, 2019, Sanjay Chanda entered into an employment agreement with us to serve as our Chief Development Officer on an at-will basis. Pursuant to Dr. Chanda’s employment agreement,

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Dr. Chanda's initial base salary was \$310,000. Currently, his annual base salary is \$360,000, and he is eligible for an annual target bonus of 30% of his base salary. In connection with his employment, Dr. Chanda was granted an initial first option award to purchase 34,201 shares of our common stock, 25% of which vest on the one-year anniversary of the vesting commencement date, and the remainder vesting on a monthly basis thereafter, and a second option award to purchase 8,264 shares of our common stock, 1/48th of which vest on a monthly basis.

Dr. Chanda is entitled to certain equity acceleration benefits in the event of an employment termination in certain circumstances, which are described below under "—Potential Payments upon Termination or Change in Control."

Potential Payments and Benefits upon Termination or Change in Control

Each of our named executive officers entered into a Change in Control Agreement with us on June 23, 2020, each of which provides that, if the executive is terminated by us without "cause" (other than as a result of death or disability), or if the executive resigns for "good reason," in each case, in connection with or within 12 months following a "change in control," then, subject to the executive's execution of a release of claims, 100% of his or her unvested stock awards will immediately vest and become exercisable, and, to the extent applicable, our right of repurchase or reacquisition with respect to such stock awards will lapse.

"Cause" has the same meaning as such term in any effective employment agreement, or, in the event that an employment agreement does not provide for such definition, any one of the following events: (i) the 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) the attempted commission of, or participation in, a fraud or act of dishonesty against us; (iii) the intentional, material violation of any contract or agreement between the executive and us or of any statutory duty owed to us; (iv) unauthorized use or disclosure of our confidential information or trade secrets; or (v) gross misconduct.

"Good reason" means the occurrence of any of the following without the executive's written consent: (i) a material reduction in job duties or responsibilities inconsistent with the executive's position with the Company; provided, however, that any such reduction or change after a "change in control" will not constitute "good reason" if executive retains reasonably comparable duties and responsibilities with respect to the company's business within the successor entity following a "change in control"; (ii) a material reduction of the executive's then-current base salary or target bonus; (iii) the relocation of executive's principal place of employment to a place that increases executive's one-way commute by more than 50 miles as compared to the executive's then-current principal place of employment immediately prior to such relocation; (iv) any material breach by the Company of the 2017 Plan or any other written agreement between the Company and the executive; or (v) the failure by any successor to the Company to assume the 2017 Plan and any obligations under the 2017 Plan. The executive must give written notice to the Company of the event forming the basis of the termination for "good reason" within 60 days after the date on which the Company gives written notice to the executive of the Company's affirmative decision to take an action set forth in clauses (i), (ii), (iii), (iv), or (v) above, the Company fails to cure such basis for "good reason" resignation within 30 days after receipt of the executive's written notice and the executive terminates his or her position with the Company within 30 days following the expiration of the cure period.

"Change in control" means the first to occur of any of the following transactions that also constitutes a change in the ownership or effective control of the Company, or a change in the ownership of a substantial portion of the Company's assets, as described in U.S. Treasury Regulation Section 1.409A-3(i)(5): (A) a merger or consolidation in which the Company is not the surviving entity,

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except for a transaction the principal purpose of which is to change the state in which the Company is incorporated or any transaction that is a financing transaction (*i.e.*, one in which a majority of the members of the board of directors prior to such financing transaction constitute the majority of the members of the board of directors immediately after the closing of such financing transaction); (B) the sale, transfer, lease, or other disposition of all or substantially all of the assets of the Company (including the capital stock of the Company's subsidiary corporations); (C) any reverse merger in which the Company is the surviving entity but in which securities possessing more than 50% of the total combined voting power of the Company's outstanding securities are transferred to a person or persons different from those who held such securities immediately prior to such merger; or (D) an acquisition in a single or series of related transactions by any person or related group of persons (other than the Company or by a Company-sponsored employee benefit plan) of beneficial ownership (within the meaning of Rule 13d-3 of the Exchange Act) of securities possessing more than 50% of the total combined voting power of the Company's outstanding securities.

Other Compensation and Benefits

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, and vision plans, in each case on the same basis as all of our other employees. We pay the premiums for the medical, disability, and accidental death and dismemberment insurance for all of our employees, including our named executive officers. We generally do not provide perquisites or personal benefits to our named executive officers.

401(k) Plan

Our named executive officers are eligible to participate in our defined contribution retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees may elect to defer a percentage of their eligible compensation into the plan on a pretax or after tax basis, up to annual limits prescribed by the Code.

Equity Benefit Plans

We believe that our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of our employees, consultants and directors with the financial interests of our stockholders. In addition, we believe that our ability to grant options and other equity-based awards helps us to attract, retain and motivate employees, consultants, and directors, and encourages them to devote their best efforts to our business and financial success. The principal features of our equity incentive plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which are filed as exhibits to the registration statement of which this prospectus forms a part.

2021 Equity Incentive Plan

In _____, our board of directors adopted, and our stockholders approved, our 2021 Plan. We expect our 2021 Plan will become effective on the date of the underwriting agreement related to this offering. Our 2021 Plan came into existence upon its adoption by our board of directors, but no grants will be made under our 2021 Plan prior to its effectiveness. Once our 2021 Plan becomes effective, no further grants will be made under our 2017 Plan.

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

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2021 Plan after it becomes effective will not exceed _____ shares of our common

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stock, which is the sum of (i) _____ new shares, plus (ii) an additional number of shares not to exceed _____ shares, consisting of (a) _____ shares that remain available for the issuance of awards under our 2017 Plan as of immediately prior to the time our 2021 Plan becomes effective and (b) any shares of our common stock subject to outstanding stock options or other stock awards granted under our 2017 Plan that, on or after our 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. 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 year for a period of ten years, beginning on January 1, 2022 and continuing through January 1, 2031, in an amount equal to (1) _____ % of the total number of shares of our common stock outstanding on December 31 of the immediately preceding year, or (2) a lesser number of shares determined by our board of directors no later than December 31 of the immediately preceding year. The maximum number of shares of our common stock that may be issued on the exercise of ISOs under our 2021 Plan is _____ 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 will 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 will 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 (i) because of a failure to meet a contingency or condition required for the vesting of such shares; (ii) to satisfy the exercise, strike or purchase price of a stock award; or (iii) to satisfy a tax withholding obligation in connection with a stock award, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under our 2021 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, administers our 2021 Plan. Our board of directors may delegate to one or more of our officers the authority to (i) designate employees (other than officers) to receive specified stock awards; and (ii) determine the number of shares subject to such stock awards. Under our 2021 Plan, our board of directors has the authority to determine stock award recipients, the types of stock awards to be granted, grant dates, the number of shares subject to each stock award, the fair market value of our common stock, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award.

Under our 2021 Plan, our board of directors also generally has the authority to effect, with the consent of any materially adversely affected participant, (i) the reduction of the exercise, purchase, or strike price of any outstanding option or stock appreciation right; (ii) the cancellation of any outstanding option or stock appreciation right and the grant in substitution therefore of other awards, cash, or other consideration; or (iii) any other action that is treated as a repricing under generally accepted accounting principles.

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

The administrator determines the term of stock options granted under our 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 optionholder, provide otherwise, if an optionholder's service relationship

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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, a beneficiary may generally exercise any vested options for a period of 18 months following the date of death. If an optionholder's service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the administrator and may include (i) cash, check, bank draft, or money order; (ii) a broker-assisted cashless exercise; (iii) the tender of shares of our common stock previously owned by the optionholder; (iv) a net exercise of the option if it is an NSO; or (v) other legal consideration approved by the administrator.

Unless the administrator provides otherwise, options generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the administrator or a duly authorized officer, an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an award holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations unless (i) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant; and (ii) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, or other written agreement between us and the recipient, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft, or money order, past or future services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The administrator 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 administrator. The administrator determines the purchase price or strike price for a stock appreciation right, which generally will not be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under our 2021 Plan will vest at the rate specified in the stock appreciation right agreement as determined by the administrator. Stock appreciation rights may be settled in cash or shares of our common stock or in any other form of payment as determined by our board of directors and specified in the stock appreciation right agreement.

The administrator determines the term of stock appreciation rights granted under our 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 upon the termination date. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. Our 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, our common stock.

The performance goals may be based on any measure of performance selected by our board of directors. The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by our board of directors at the time the performance award is granted, our board will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (i) to exclude restructuring or other nonrecurring charges; (ii) to exclude exchange rate effects; (iii) to exclude the effects of changes to generally accepted accounting principles; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (vi) to exclude the dilutive effects of acquisitions or joint ventures; (vii) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (viii) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (ix) to exclude the effects of stock-based compensation and the award of bonuses under our bonus plans; (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (xi) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other Stock Awards. The administrator may grant other awards based in whole or in part by reference to our common stock. The administrator will set the number of shares under the stock award (or cash equivalent) and all other terms and conditions of such awards.

Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid to any non-employee director with respect to any fiscal year, including awards granted and cash fees paid by us to such non-employee director, will not exceed \$ _____ in total value, except such amount will increase to \$ _____ for the first year for newly appointed or elected non-employee directors.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split, or recapitalization, appropriate adjustments will be made to (i) the class and maximum number of shares reserved for issuance under our 2021 Plan, (ii) the class and maximum number of shares by which the share reserve may increase automatically each year, (iii) the class and maximum number of shares that may be issued on the exercise of ISOs and (iv) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of a corporate transaction (as defined 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 administrator at the time of grant, any stock awards outstanding under our 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 (or, in the case of performance awards with multiple vesting levels depending on the level of performance, vesting will accelerate at 100% of the target level) to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the effectiveness of the corporate transaction); and (ii) any such stock awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the corporate transaction.

In the event a stock award will terminate if not exercised prior to the effective time of a corporate transaction, the administrator may provide, in its sole discretion, that the holder of such stock award may not exercise such stock award but instead will receive a payment equal in value to the excess (if any) of (i) the value of the property the participant would have received upon the exercise of the stock award, over (ii) any per share exercise price payable by such holder, if applicable. In addition, any escrow, holdback, earn out, or similar provisions in the definitive agreement for the corporate transaction may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of our common stock.

Change in Control. Stock awards granted under our 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 at any time, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopted our 2021 Plan. No stock awards may be granted under our 2021 Plan while it is suspended or after it is terminated.

2021 Employee Stock Purchase Plan

In _____, our board of directors adopted, and our stockholders approved, our ESPP. Our ESPP will become effective immediately prior to and contingent upon the execution of the underwriting agreement related to this offering. The purpose of our 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. Our 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. The other component permits the grant of purchase rights that do not qualify for such favorable tax treatment in order to allow deviations necessary to permit participation by eligible employees who are foreign nationals or employed outside of the United States while complying with applicable foreign laws.

Share Reserve. Our ESPP authorizes the issuance of _____ shares of our common stock under purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each year for a period of ten years, beginning on January 1, 2022 and continuing through January 1, 2031, by the lesser of (i) _____ % of the total number of shares of our common stock outstanding on December 31 of the immediately preceding year; and (ii) _____ shares, except before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (i) and (ii).

Administration. Our board of directors, or a duly authorized committee of our board of directors, administers our ESPP. Our 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 our ESPP, our board of directors may specify offerings with durations of not more than 27 months and to specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. Our ESPP provides that an offering may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in our ESPP and to contribute, normally through payroll deductions, a percentage of their earnings (as defined in our ESPP) for the purchase of our common stock under our ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in our ESPP at a price per share that is not less than the lesser of (i) 85% of the fair market value of a share of our common stock on the first day of an offering; or (ii) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in our ESPP, as determined by our board of directors: (i) being customarily employed for more than 20 hours per week; (ii) being customarily employed for more than five months per calendar year; or (iii) continuous employment with us or one of our affiliates for a period of time (not

to exceed two years). No employee may purchase shares under our ESPP at a rate in excess of \$25,000 worth of our common stock (based on the fair market value per share of our common stock at the beginning of an offering) for each calendar year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under our ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value under Section 424(d) of the Code.

Changes to Capital Structure. Our ESPP provides that in the event there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or similar transaction, our board of directors will make appropriate adjustments to: (i) the class(es) and maximum number of shares reserved under our ESPP; (ii) the class(es) and maximum number of shares by which the share reserve may increase automatically each year; (iii) the class(es) and number of shares subject to, and purchase price applicable to, outstanding offerings and purchase rights; and (iv) the class(es) and number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. Our ESPP provides that in the event of a corporate transaction (as defined in the ESPP), any then-outstanding rights to purchase our common stock under our ESPP may be assumed, continued, or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue, or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days before such corporate transaction, and such purchase rights will terminate immediately after such purchase.

Plan Amendment or Termination. Our board of directors has the authority to amend or terminate our ESPP, except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

Amended and Restated 2017 Equity Incentive Plan

Our board of directors adopted, and our stockholders approved, the AN2 Therapeutics, Inc. Amended and Restated 2017 Equity Incentive Plan, or 2017 Plan, in February 2017. The 2017 Plan was most recently amended in November 2019. The 2017 Plan will be terminated on the date the 2021 Plan becomes effective, and thereafter no further stock awards will be granted under the 2017 Plan. However, any outstanding stock awards granted under the 2017 Plan will remain outstanding, subject to the terms of our 2017 Plan and award agreements, until such outstanding options are exercised or until any stock awards terminate or expire by their terms.

Awards. Our 2017 Plan provides for the grant of incentive stock options, or ISOs, nonstatutory stock options, or NSOs, restricted stock units, stock appreciation rights, restricted stock awards, and other awards. ISOs may only be granted to our employees, including employees of any parent or subsidiary. All other stock awards may be granted to our employees, directors, and consultants, including employees and consultants of any parent or subsidiary.

Authorized Shares. As of December 31, 2020, options to purchase 127,343 shares of our common stock were outstanding, and no shares of our common stock remained available for future issuance under our 2017 Plan. The options outstanding as of December 31, 2020 had a weighted-average exercise price of \$0.99 per share. Subject to capitalization adjustments, the maximum

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aggregate number of shares of our common stock that may be issued under the 2017 Plan is 1,249,274 shares, and the maximum number of shares issuable pursuant to ISOs is 1,249,274 shares.

Plan Administration. Our board or a duly authorized committee of our board administers our 2017 Plan and the awards granted under it. Under our 2017 Plan, the administrator has the authority to, among other things, determine who will be granted stock awards, to determine the terms and conditions of each stock award (including the number of shares subject to the stock award, when the stock award will vest and, as applicable, become exercisable), to accelerate the time(s) at which a stock award may vest or be exercised, and to construe and interpret the terms of our 2017 Plan and stock awards granted thereunder.

Options. Options granted under our 2017 Plan have terms substantially similar to options that may be granted under our 2021 Plan once it becomes effective.

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, proportionate adjustments will be made to (i) the class and maximum number of shares reserved for issuance under our 2017 Plan, and (ii) the class and number of shares and exercise price or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. Our 2017 Plan provides that in the event of a “corporate transaction” (as defined under our 2017 Plan), stock awards outstanding under our 2017 Plan will be treated as provided in the agreement evidencing such acquisition or other combination, which may provide for one or more of the following: (i) acquisition or continuation of outstanding stock awards by the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company); (ii) assignment of reacquisition or repurchase rights we hold to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company); (iii) acceleration of vesting, in whole or in part, of a stock award; (iv) lapse, in whole or in part, of any reacquisition or repurchase rights we hold; (v) cancellation of the stock award to the extent not vested or exercised prior to the effective time of the “corporate transaction” in exchange for cash consideration; and (vi) payment in such form as may be determined by our board equal to the excess, if any, of (A) the value of the property (B) over the applicable exercise price. Our board need not take the same action or actions with respect to all stock awards or portions thereof or with respect to all participants.

Plan Amendment or Termination. Our board has the authority to terminate or amend our 2017 Plan at any time, except any amendment of our 2017 Plan will be subject to stockholder approval if required by applicable law. The termination or amendment of our 2017 Plan will not affect any share previously issued or any stock award previously granted under our 2017 Plan. As described above, our 2017 Plan will be terminated upon the effective date of the 2021 Plan and no future awards will be granted under the 2017 Plan following such termination.

Limitations on Liability and Indemnification

Our amended and restated certificate of incorporation, which will become effective immediately after the closing of this offering, will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

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- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation will authorize us to indemnify our directors, officers, employees and other agents to the fullest extent permitted by Delaware law. Our amended and restated bylaws will provide that we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our amended and restated bylaws will also provide that, on satisfaction of certain conditions, we will advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines, and settlement amounts incurred by any of these individuals in any action or proceeding.

We believe that these amended and restated certificate of incorporation and amended and restated bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Plans

Our directors, officers and key employees may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades under parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they do not possess of material nonpublic information, subject to compliance with the terms of our insider trading policy. During the first 180 days from this offering, the sale of any shares under such plan would be subject to the lock-up agreement that the director or officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following includes a summary of transactions since our inception and any currently proposed transactions to which we have been or are to be a party in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under the section titled "Executive Compensation." We also describe below certain other transactions with our directors, executive officers and stockholders.

Series A Redeemable Convertible Preferred Stock Financing

In multiple closings held between November 2019 and December 2020, we issued and sold an aggregate of 2,582,403 shares of our Series A redeemable convertible preferred stock at a purchase price of \$5.99 per share for an aggregate purchase price of approximately \$15.5 million, including in connection with the license agreement with Anacor.

The following table summarizes the Series A redeemable convertible preferred stock purchased 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 Redeemable Convertible Preferred Stock Purchased (#)	Aggregate Purchase Price (\$)
Entities affiliated with Adjuvant ⁽²⁾	834,724	4,999,996.76
Entities affiliated with MGC Venture Partners ⁽³⁾	262,775	1,574,022.25
Anacor Pharmaceuticals, Inc. ⁽⁴⁾	579,064	3,468,593.36
Brii Biosciences Limited ⁽⁵⁾	500,834	2,999,995.66
Z Investments, LLC ⁽⁶⁾	41,735	249,992.65
Total	2,219,132	13,292,600.68

- (1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the section titled "Principal Stockholders."
- (2) Adjuvant Global Health Technology Fund L.P. and Adjuvant Global Health Technology Fund DE, L.P. (together, Adjuvant) is a holder of 5% or more of our capital stock, and is affiliated with Kabeer Aziz, one of our non-employee directors.
- (3) MGC Venture Partners 2018, LP and MGC Venture Partners QP 2018 LP (together, MGC Venture Partners) is a holder of 5% or more of our capital stock, and is affiliated with Rob Readnour, one of our non-employee directors.
- (4) Anacor is a holder of 5% or more of our capital stock.
- (5) Brii Biosciences is a holder of 5% or more of our capital stock.
- (6) Z Investments, LLC is affiliated with Joseph Zakrzewski, one of our non-employee directors.

Series B Redeemable Convertible Preferred Stock Financing

In March 2021, we issued and sold an aggregate of 2,266,661 shares of our Series B redeemable convertible preferred stock at a purchase price of \$35.29404 per share for an aggregate purchase price of approximately \$80.0 million.

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The following table summarizes the Series B redeemable convertible preferred stock purchased by holders of more than 5% of our capital stock and entities affiliated with our executive officers and members of our board of directors.

Participants⁽¹⁾	Shares of Series B Redeemable Convertible Preferred Stock Purchased (#)	Aggregate Purchase Price (\$)
Entities affiliated with Adjuvant ⁽²⁾	198,333	6,999,972.84
Entities affiliated with MGC Venture Partners ⁽³⁾	56,666	1,999,972.08
Entities affiliated with RA Capital ⁽⁴⁾	850,001	29,999,969.30
Entities affiliated with Biotechnology Value Fund ⁽⁵⁾	389,584	13,749,993.29
Total	1,494,584	52,749,907.51

- (1) Additional details regarding these stockholders and their equity holdings are included in this prospectus under the section titled “Principal Stockholders.”
- (2) Adjuvant is a holder of 5% or more of our capital stock, and is affiliated with Kabeer Aziz, one of our non-employee directors.
- (3) MGC Venture Partners is a holder of 5% or more of our capital stock, and is affiliated with Rob Readnour, one of our non-employee directors.
- (4) RA Capital Healthcare Fund, L.P. and RA Capital Nexus Fund II, L.P. (together, RA Capital) is a holder of 5% or more of our capital stock.
- (5) Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., and Biotechnology Value Trading Fund OS, L.P. (together, Biotechnology Value Fund) is a holder of 5% or more of our capital stock.

Employment Agreements and Stock Option Grants to Directors and Executive Officers

We have entered into employment agreements with certain of our named executive officers, and granted stock options to our named executive officers and certain of our directors, as more fully described in the sections titled “Executive Compensation” and “Management—Non-Employee Director Compensation.”

Investors’ Rights Agreement

In March 2021, we entered into an Amended and Restated Investors’ Rights Agreement (the Rights Agreement) with certain holders of more than 5% of our outstanding capital stock, including Adjuvant, MGC, Anacor, Bii Biosciences, RA Capital, and Biotechnology Value Fund, and certain affiliates of our directors.

The Rights Agreement grants to the holders of our outstanding redeemable convertible preferred stock certain rights, including certain registration rights with respect to the registrable securities held by them. See the section titled “Description of Capital Stock—Registration Rights” for additional information. In addition, the Rights Agreement imposes certain affirmative obligations on us, including our obligation to, among other things, (i) grant each holder who holds at least 350,000 shares of our redeemable convertible preferred stock (the Qualified Investors) a right of first offer with respect to future sales of our equity, excluding the shares to be offered and sold in this offering, and grant certain information and inspection rights to such Major Investors. Each of these obligations will terminate in connection with the closing of this offering.

Voting Agreement

In March 2021, we entered into an Amended and Restated Voting Agreement (the Voting Agreement) with certain holders of more than 5% of our outstanding capital stock, including Adjuvant, MGC, Anacor, Bii Biosciences, RA Capital, and Biotechnology Value Fund, and certain affiliates of our directors.

Pursuant to the Voting Agreement, as amended, Adjuvant and MGC, collectively, have the right to designate two members to be elected to our board of directors. See the section titled “Management—Composition of Our Board of Directors.” The Voting Agreement will terminate by its terms in connection with the closing of this offering and none of our stockholders will have any continuing rights regarding the election or designation of members of our board of directors following this offering.

Right of First Refusal and Co-Sale Agreement

In March 2021, we entered into an Amended and Restated Right of First Refusal and Co-Sale Agreement (the Co-Sale Agreement) with certain holders of more than 5% of our outstanding capital stock, including Adjuvant, MGC, Anacor, Bii Biosciences, RA Capital, and Biotechnology Value Fund, and certain affiliates of our directors.

Pursuant to the Co-Sale Agreement, we have a right of first refusal in respect of certain sales of securities by certain holders of our common stock and redeemable convertible preferred stock. To the extent we do not exercise such right in full, the Major Investors are granted certain rights of first refusal and co-sale in respect of such sale. The Co-Sale Agreement will terminate in connection with the closing of this offering.

Limitations on Liability and Indemnification Agreements

Our amended and restated certificate of incorporation will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our employees and other agents when determined appropriate by the board. In addition, we have entered into or intend to enter into an indemnification agreement with each of our directors and executive officers, which will require us to indemnify them. For more information regarding these agreements, see the section titled “Executive Compensation—Limitations on Liability and Indemnification.”

Policies and Procedures for Transactions with Related Persons

Prior to closing of this offering, we intend to adopt a written policy that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock, and any members of the immediate family of any of the foregoing persons are not permitted to enter into a related person transaction with us without the approval or ratification of our board of directors or our audit committee. Any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of any class of our common stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeds \$120,000 (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 no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock as of August 31, 2021 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each our of named executive officers; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules and regulations of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership before the offering is based on 6,009,446 shares of our common stock outstanding as of August 31, 2021, after giving effect to the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into 4,849,064 shares of our common stock in connection with the closing of this offering.

Applicable percentage ownership after the offering is based on _____ shares of common stock outstanding immediately after the closing of this offering, after giving effect to the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into 4,849,064 shares of our common stock in connection with the closing of this offering. In computing the number of shares beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares subject to options held by the person that are currently exercisable, or exercisable within 60 days of August 31, 2021. However, except as described above, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address for each beneficial owner listed in the table below is c/o AN2 Therapeutics, Inc., 1800 El Camino Real, Suite D, Menlo Park, California 94027.

Name of Beneficial Owner	Number of Shares Beneficially Owned (#)	Percentage of Shares Beneficially Owned	
		Before Offering (%)	After Offering (%)
Greater than 5% Holders:			
Entities affiliated with Adjuvant Global Health Technology Fund(1)	1,033,057	17.2%	
Entities affiliated with RA Capital Healthcare Fund(2)	850,001	14.1	
Anacor Pharmaceuticals, Inc.(3)	579,064	9.6	
Brii Biosciences Limited(4)	500,834	8.3	
Entities affiliated with Biotechnology Value Fund(5)	389,584	6.5	
Entities affiliated with MGC Venture Partners(6)	319,441	5.3	

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Name of Beneficial Owner	Number of Shares Beneficially Owned (#)	Percentage of Shares Beneficially Owned	
		Before Offering (%)	After Offering (%)
Directors and Named Executive Officers:			
Eric Easom ⁽⁷⁾	565,367	9.4%	
Sanjay Chanda, Ph.D. ⁽⁸⁾	19,241	*	
Lucy Day ⁽⁹⁾	13,653	*	
Kabeer Aziz ⁽¹⁰⁾	1,033,057	17.2	
Gilbert Marks, M.D. ⁽¹¹⁾	10,458	*	
Patricia Martin ⁽¹²⁾	1,770	*	
Rob Readnour, Ph.D. ⁽¹³⁾	319,441	5.3	
Stephanie Wong ⁽¹⁴⁾	1,770	*	
Joseph Zakrzewski ⁽¹⁵⁾	263,818	4.4	
All directors and executive officers as a group (11 persons) ⁽¹⁶⁾	2,257,848	37.1%	

* Represents beneficial ownership of less than 1%.

- (1) Consists of (i) 701,947 shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock and 166,785 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by Adjuvant Global Health Technology Fund L.P. and (ii) 132,777 shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock and 31,548 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by Adjuvant Global Health Technology Fund DE, L.P. Adjuvant Global Health Technology Fund L.P. and Adjuvant Global Health Technology Fund DE, L.P. are managed by the same Registered Investment Advisor, Adjuvant Capital, L.P. Glenn Rockman and Jenny Yip are the managing members of Adjuvant Capital, L.P. and have the power to vote or dispose of the shares held by Adjuvant Global Health Technology Fund L.P. and Adjuvant Global Health Technology Fund DE, L.P. The address of the persons and entities listed above is 501 Fifth Avenue, Room 1404, New York, New York 10017.
- (2) Consists of (i) 722,501 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by RA Capital Healthcare Fund, L.P. (RA Healthcare) and (ii) 127,500 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by RA Capital Nexus Fund II, L.P. (RA Nexus Fund). RA Capital Management, L.P. (RACM) is the investment manager for RA Healthcare and RA Nexus Fund. The general partner of RACM is RA Capital Management GP, LLC. The general partner of RA Healthcare is RA Capital Healthcare Fund GP, LLC. The general partner of RA Nexus Fund is RA Capital Nexus Fund II GP, LLC. Peter Kolchinsky and Rajeev Shah are the managing members of RA Capital Management GP, LLC, RA Capital Healthcare Fund GP, LLC, and RA Capital Nexus Fund II GP, LLC and have the power to vote or dispose of the shares held by RA Healthcare and Nexus Fund II. The address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.
- (3) Consists of shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock. The principal business address for Anacor Pharmaceuticals, Inc. is c/o Pfizer Inc. 235 East 42nd Street, New York, New York 10017.
- (4) Consists of shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock. The principal business address for Bii Biosciences Limited is WeWork One Center, Unit 05-130, 110 Corcoran Street, Durham, North Carolina 27701.
- (5) Consists of (i) 209,764 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by Biotechnology Value Fund, L.P. (BVF), (ii) 154,627 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by Biotechnology Value Fund II, L.P. (BVF2), and (iii) 25,193 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by Biotechnology Value Trading Fund OS, L.P. (Trading Fund). BVF I GP LLC (BVF GP) is the general partner of BVF and disclaims beneficial ownership of shares of common stock held by BVF. BVF II GP LLC (BVF2 GP) is the general partner of BVF2 and disclaims beneficial ownership of shares of common stock held by

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BVF2. BVF GP Holdings LLC (BVF GPH) is the sole member of each of BVF GP and BVF2 GP and disclaims beneficial ownership of the shares of common stock held in aggregate by BVF and BVF2. BVF Partners OS, Ltd. (Partners OS) is the general partner of the Trading Fund and disclaims beneficial ownership of the shares of common stock held by Trading Fund. BVF Partners L.P. is the investment manager of BVF and disclaims beneficial ownership of the shares of common stock held by BVF, BVF2, and Trading Fund. BVF Inc. is the general partner of, BVF Partners L.P., OS Partners and disclaims beneficial ownership of the shares of common stock held by BVF, BVF2, and Trading Fund. Mark Lampert is a director and officer of BVF Inc. and disclaims beneficial ownership of the shares of common stock held by BVF, BVF2, and Trading Fund. The business address of BVF, BVF GP, BVF2, BVF2 GP, BVF GPH, BVF Partners L.P., OS Partners, BVF Inc., and Mr. Lampert is 44 Montgomery St., 40th Floor, San Francisco, California 94104. The business address of Trading Fund and Partners OS is PO Box 309 Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

- (6) Consists of (i) 141,583 shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock and 30,532 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by MGC Venture Partners QP 2018 LP (MGC 2018 QP) and (ii) 121,192 shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock and 26,134 shares of common stock issuable upon conversion of Series B redeemable convertible preferred stock held by MGC Venture Partners 2018, LP. (MGC 2018 LP). MGC Venture Partners 2018 GP, LLC (MGC 2018 GP) is the general partner of MGC 2018 LP and MGC 2018 QP. MGC 2018 GP has shared voting and shared dispositive power over the shares held by MGC 2018 LP and MGC 2018 QP. Dr. Readnour is a managing partner of MGC 2018 GP and has shared voting power and shared dispositive power over the shares of common stock held by MGC 2018 LP and MGC 2018 QP. Mr. Readnour, however, disclaims beneficial ownership of such shares of common stock, except to the extent of any pecuniary interest therein. The address of each of the foregoing entities and Dr. Readnour is 3835 Cleghorn Avenue, Suite 300 Nashville, Tennessee 37215.
- (7) Consists of (i) 550,000 shares of common stock held by the Easom Living Trust dated August 21, 2019 of which Mr. Easom is a trustee, (ii) 2,086 shares of common stock held by Mr. Easom issuable upon conversion of Series A redeemable convertible preferred stock, and (iii) 13,281 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (8) Consists of 19,241 shares of common stock that may be acquired by Mr. Chanda pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (9) Consists of 13,653 shares of common stock that may be acquired by Ms. Day pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (10) Consists of the shares described in footnote (1) above. Mr. Aziz disclaims beneficial ownership of all such shares except to the extent of his pecuniary interests therein.
- (11) Consists of (i) 9,703 shares of common stock, 3,478 of which shares will be vested within 60 days of August 31, 2021, and 6,225 of which shares will continue to be subject to our repurchase right and (ii) 755 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (12) Consists of 1,770 shares of common stock that may be acquired by Ms. Martin pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (13) Consists of the shares described in footnote (6) above. Dr. Readnour disclaims beneficial ownership of all such shares except to the extent of his pecuniary interests therein.
- (14) Consists of 1,770 shares of common stock that may be acquired by Ms. Wong pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (15) Consists of (i) 215,000 shares of common stock held by Z3 Trust, of which Mr. Zakrzewski is an affiliate, (ii) 41,735 shares of common stock issuable upon conversion of Series A redeemable convertible preferred stock held by Z Investments, LLC, of which Mr. Zakrzewski is an affiliate, and (iii) 7,083 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of August 31, 2021.
- (16) See footnotes 7 through 15 above; also includes Kevin Krause and Paul Eckburg, M.D., who are executive officers but not named executive officers.

DESCRIPTION OF CAPITAL STOCK

General

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation, which will become effective immediately after the closing of this offering, and the amended and restated bylaws, which will become effective upon the closing of this offering. Copies of these documents have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will be in effect on the closing of this offering.

Upon filing of our amended and restated certificate of incorporation and the closing of this offering, our authorized capital stock will consist of _____ shares of common stock, par value \$0.00001 per share and _____ shares of preferred stock, par value \$0.00001 per share. All of our authorized shares of preferred stock will be undesignated.

As of June 30, 2021, after giving effect to the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into 4,849,064 shares of our common stock upon the closing of this offering, there were 6,009,446 shares of common stock outstanding and held of record by 67 stockholders.

Common Stock

Voting Rights

The common stock is entitled to one vote per share on any matter that is submitted to a vote of our stockholders. Our amended and restated certificate of incorporation does not provide for cumulative voting for the election of directors. Our amended and restated certificate of incorporation establishes a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of our stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. The affirmative vote of holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of capital stock, voting as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified structure of our board of directors, the size of our board of directors, removal of directors, director liability, vacancies on our board of directors, special meetings, stockholder notices, actions by written consent, and exclusive jurisdiction.

Economic Rights

Except as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law, all shares of common stock will have the same rights and privileges and rank equally, share ratably and be identical in all respects for all matters, including those described below.

Dividends. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. See the section titled "Dividend Policy" for further information.

Liquidation Rights. On our liquidation, dissolution, or winding-up, the holders of common stock will be entitled to share equally, identically, and ratably in all assets remaining after the payment of any

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liabilities, liquidation preferences, and accrued or declared but unpaid dividends, if any, with respect to any outstanding preferred stock, unless a different treatment is approved by the affirmative vote of the holders of a majority of the outstanding shares of such affected class, voting separately as a class.

No Preemptive or Similar Rights

The holders of our shares of common stock are not entitled to preemptive rights, and are not subject to conversion, redemption, or sinking fund provisions.

Fully Paid and Non-Assessable

In connection with this offering, our legal counsel will opine that the shares of our common stock to be issued under this offering will be fully paid and non-assessable.

Preferred Stock

Upon the closing of this offering, all of our currently outstanding shares of redeemable convertible preferred stock will convert into common stock and we will not have any redeemable convertible preferred stock outstanding. Immediately after the closing of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of redeemable convertible preferred stock. Under the amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to _____ shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

Stock Options

As of June 30, 2021, 455,868 shares of common stock were issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of \$11.77 per share. Subsequent to June 30, 2021, we granted an additional 135,518 shares of common stock with a weighted-average exercise price of \$15.52 per share. Following completion of this offering, _____ shares of our common stock will be reserved for future issuance under the 2021 Plan, which will become effective once the registration statement of which this prospectus forms a part is declared effective, as well as any future automatic annual increases in the number of shares of common stock reserved for issuance under the 2021 Plan and any shares underlying outstanding stock awards granted under the 2017 Plan, that expire or are repurchased, forfeited, cancelled, or withheld. For additional information regarding terms of our equity incentive plans, see the section titled "Executive Compensation—Equity Benefit Plans."

Registration Rights

Upon the closing of this offering and subject to the lock-up agreements entered into in connection with this offering and federal securities laws, certain holders of shares of our common stock, including those shares of our common stock that will be issued upon the conversion of our redeemable convertible

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preferred stock in connection with this offering, will initially be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of our amended and restated investors' rights agreement and are described in additional detail below. The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback, and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the holders may include. The demand, piggyback, and Form S-3 registration rights described below will expire no later than three years after the closing of this offering.

Demand Registration Rights

Upon the closing of this offering, holders of an aggregate of _____ shares of our common stock will be entitled to certain demand registration rights. At any time beginning 180 days after the closing of this offering, the holders of _____ % of these shares may request that we register all or a portion of their shares. We are not required to effect more than registration statements which are declared or ordered effective. Such request for registration must cover shares with an anticipated aggregate offering price of at least \$ _____ million. With certain exceptions, we are not required to effect the filing of a registration statement during the period starting with the date of the filing of, and ending on a date 180 days following the effective date of the registration statement for this offering.

Piggyback Registration Rights

In connection with this offering, the holders of an aggregate of _____ shares of our common stock were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. After this offering, in the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain piggyback registration rights allowing the holder to include their shares in such registration, subject to certain marketing and other limitations.

Form S-3 Registration Rights

Upon the closing of this offering, holders of an aggregate of _____ shares of common stock will be entitled to certain Form S-3 registration rights. Holders of _____ % 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 net proceeds of the shares offered would equal or exceed \$ _____ million. We will not be required to effect more than registrations on Form S-3 within any 12-month period.

Anti-Takeover Provisions

The provisions of Delaware law, our amended and restated certificate of incorporation, and our amended and restated bylaws, which are summarized below, may have the effect of delaying, deferring or discouraging another person from acquiring control of our company. They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Certificate of Incorporation and Bylaws to be in Effect in Connection with this Offering

Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the voting power of our shares of common stock will be able to elect all of our directors. Our amended and restated certificate of incorporation, to be effective immediately after the closing of this offering, and our amended and restated bylaws, to be effective on the closing of this offering, will provide for stockholder actions at a duly called meeting of stockholders or, before the date on which all shares of common stock convert into a single class, by written consent. A special meeting of stockholders may be called by a majority of our board of directors, the chair of our board of directors, or our chief executive officer or president. Our amended and restated bylaws will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors.

As described above in “Management—Composition of Our Board of Directors,” in accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms.

The foregoing provisions will make it more difficult for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

When we have a class of voting stock that is either listed on a national securities exchange or held of record by more than 2,000 stockholders, we will be subject to Section 203 of the DGCL which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, subject to certain exceptions.

Choice of Forum

Our amended and restated certificate of incorporation to be effective immediately after the closing of this offering will provide that the Court of Chancery of the State of Delaware (or, if and only if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom is the sole and exclusive forum for the following claims or causes of action under the Delaware statutory or common law: (i) any derivative claim or cause of action brought on our behalf; (ii) any claim or cause of action for a breach of fiduciary duty owed by any of our current or former directors, officers, or other employees to us or our stockholders; (iii) any claim or cause of action against us or any of our current or former directors, officers or other employees arising out of or pursuant to any provision of the DGCL, our amended and restated certificate of incorporation, or our bylaws (as each may be amended from time to time); (iv) any claim or cause of action seeking to interpret, apply, enforce or determine the

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validity of our amended and restated certificate of incorporation or our amended and restated bylaws (as each may be amended from time to time, including any right, obligation, or remedy thereunder); (v) any claim or cause of action as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any claim or cause of action against us or any of our current or former directors, officers, or other employees governed by the internal-affairs doctrine, 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. Our amended and restated certificate of incorporation to be effective on the closing of this offering will further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against an defendant to such complaint. The choice of forum provisions would not apply to claims or causes of action brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

For the avoidance of doubt, these provisions are intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Additionally, our amended and restated certificate of incorporation to be effective immediately after the closing of this offering will provide that any person or entity holding, owning or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to these provisions.

Limitations on Liability and Indemnification

See the section titled "Executive Compensation—Limitations on Liability and Indemnification."

Exchange Listing

Our common stock is currently not listed on any securities exchange. We intend to apply to have common stock approved for listing on The Nasdaq Global Market under the symbol "ANTX."

Transfer Agent and Registrar

On the closing of this offering, the transfer agent and registrar for our common stock will be . The transfer agent's address is .

SHARES ELIGIBLE FOR FUTURE SALE

Before the closing of this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock, including shares issued on the exercise of outstanding options, in the public market after this offering, or the possibility of these sales or issuances occurring, could adversely affect the prevailing market price for our common stock or impair our ability to raise equity capital.

Based on our shares outstanding as of June 30, 2021, upon the closing of this offering, a total of _____ shares of common stock will be outstanding, assuming the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into 4,849,064 shares of our common stock in connection with 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, or Rule 144.

The remaining shares of common stock will be, and shares of common stock subject to stock options will be on issuance, "restricted securities," as that term is defined in Rule 144. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below.

Subject to the lock-up agreements described below and the provisions of Rule 144 or Rule 701 under the Securities Act, as well as our insider trading policy, these restricted securities will be available for sale in the public market after the date of this prospectus.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, an eligible stockholder is entitled to sell such shares without complying with the manner of sale, volume limitation, or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. To be an eligible stockholder under Rule 144, such stockholder must not be deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and must have beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144, subject to the expiration of the lock-up agreements described below.

In general, under Rule 144, as currently in effect, our affiliates, or persons selling shares on behalf of our affiliates are entitled to sell shares on expiration of the lock-up agreements described below. Beginning 90 days after the date of this prospectus, within any three-month period, such stockholders may sell a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately _____ shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares of common stock from us; or
- the average weekly trading volume of our common stock on The Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

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Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 of the Securities Act (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 2017 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 substantially all of our common stock and securities exercisable for or convertible into our common stock outstanding immediately on the closing of this offering, have agreed with the underwriters that, until 180 days after the date of the underwriting agreement related to this offering, we and they will not, without the prior written consent of the representatives of the underwriters, subject to certain exceptions, directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right, or warrant to purchase, lend or otherwise transfer or dispose of any of our shares of common stock, or any securities convertible into or exercisable or exchangeable for shares of our common stock, or enter into any hedging, swap, or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the securities, whether any such swap or transaction is to be settled by delivery of our common stock or other securities, in cash or otherwise. These agreements are described in "Underwriting." The representatives of the underwriters may, in their sole discretion, release any of the securities subject to these lock-up agreements at any time.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain security holders, including the amended and restated investors' rights agreement, our standard form of option agreement and our standard form of restricted stock agreement, that contain market stand-off provisions or incorporate market stand-off provisions from our equity incentive plan imposing restrictions on the ability of such security holders to offer, sell, or transfer our equity securities for a period of 180 days following the date of this prospectus.

Registration Rights

Upon the closing of this offering, pursuant to our amended and restated investors' rights agreement, the holders of _____ shares of our common stock, or their transferees, will be entitled to certain rights with respect to the registration of the offer and sale of their shares under the Securities

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Act, subject to the terms of the lock-up agreements described under the section titled “—Lock-up Arrangements” above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately on the effectiveness of the registration. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See the section titled “Description of Capital Stock—Registration Rights” for additional information.

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

The following is a summary of certain material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering. This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, does not address the potential application of the Medicare contribution tax on net investment income, and does not address any estate or gift tax consequences or any tax consequences arising under any state, local, or foreign tax laws, or any other U.S. federal tax laws. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the 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 a non-U.S. holder in light of such non-U.S. holder's particular circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to non-U.S. holders subject to special rules under the U.S. federal income tax laws, including:

- certain former citizens or long-term residents of the United States;
- partnerships or other pass-through entities (and investors therein);
- "controlled foreign corporations";
- "passive foreign investment companies";
- corporations that accumulate earnings to avoid U.S. federal income tax;
- banks, financial institutions, investment funds, insurance companies, brokers, dealers, or traders in securities;
- tax-exempt organizations and governmental organizations;
- tax-qualified retirement plans;
- persons who acquire our common stock through the exercise of an option or otherwise as compensation;
- qualified foreign pension funds as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons subject to the alternative minimum tax;
- persons subject to special tax accounting rules under Section 451(b) of the Code;
- persons that own or have owned, actually or constructively, more than 5% of our common stock;
- persons who have elected to mark securities to market; and
- persons holding our common stock as part of a hedging or conversion transaction or straddle, or a constructive sale, or other risk reduction strategy or integrated investment.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships holding our common stock and the partners in such partnerships are urged to consult their tax advisors about the particular U.S. federal income tax consequences to them of holding and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Definition of Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is not a “U.S. person” or a partnership (including any entity or arrangement treated as a partnership) 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 (i) whose administration is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust, or (ii) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on Our Common Stock

As described in the section titled “Dividend Policy,” 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 excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under “—Gain on Disposition of Our Common Stock” below.

Subject to the discussion below regarding effectively connected income, backup withholding and FATCA (as defined below), dividends paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends or such lower rate specified by an applicable income tax treaty. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish us or our withholding agent with a valid IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E (in the case of entities), or other appropriate form, certifying such holder’s qualification for the reduced rate. This certification must be provided to us or our withholding agent before the payment of dividends and must be updated periodically. In the case of a non-U.S. holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of the tax treaty, dividends will be treated as paid to the entity or to those holding an interest in the entity. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder’s behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our withholding agent, either directly or through other intermediaries.

If a non-U.S. holder holds our common stock in connection with the conduct of a trade or business in the United States, and dividends paid on our common stock are effectively connected with such

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holder's U.S. trade or business (and are attributable to such holder's permanent establishment or fixed base in the United States if required by an applicable tax treaty), the non-U.S. holder will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a valid IRS Form W-8ECI (or applicable successor form) to the applicable withholding agent.

However, any such effectively connected dividends paid on our common stock generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

Non-U.S. holders that do not provide the required certification on a timely basis, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and FATCA (as defined below), a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized on the sale or other disposition of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States;
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition, and certain other requirements are met; or
- we are or become a United States real property holding corporation, or a USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock, and our common stock is not regularly traded on an established securities market during the calendar year in which the sale or other disposition occurs.

Determining whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other trade or business assets and our foreign real property interests. We believe that we are not currently and we do not anticipate becoming a USRPHC for U.S. federal income tax purposes, although there can be no assurance we will not in the future become a USRPHC.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. 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 or other taxable disposition of our common stock which 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. If we are or become a United States real property holding corporation during the period described in the third bullet point above and our common stock is not regularly traded for purposes of

the relevant rules, gain arising from the sale or other taxable disposition of our common stock by a non-U.S. holder will generally be subject to U.S. federal income tax in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

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

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating the amount of 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. 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 certain other requirements are met, and if the payor does not have actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

Backup withholding is not an additional tax. If any amount is withheld under the backup withholding rules, the non-U.S. holder should consult with a U.S. tax advisor regarding the possibility of and procedure for obtaining a refund or a credit against the non-U.S. holder's U.S. federal income tax liability, if any.

Withholding on Payment to Certain Foreign Accounts or Entities

Sections 1471 through 1474 of the Code (commonly referred to as FATCA), impose a U.S. federal withholding tax of 30% on certain payments made to a "foreign financial institution" (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding certain U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. FATCA also generally will impose a U.S. federal withholding tax of 30% on certain payments made to a non-financial foreign entity unless such entity provides the withholding agent a certification identifying certain direct and indirect U.S. owners of the entity or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. FATCA currently applies to dividends paid on our common stock and would have applied also to payments of gross proceeds from the sale or other disposition of our common stock. The U.S. Treasury Department has released proposed regulations under FATCA providing for the elimination of the federal withholding tax of 30% applicable to gross proceeds of a sale or other disposition of our common stock. Under these proposed Treasury Regulations (which may be relied upon by taxpayers prior to finalization), FATCA will not apply to gross proceeds from sales or other dispositions of our common stock.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

UNDERWRITING

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of our common stock set forth opposite its name below. Cowen and Company, LLC, SVB Leerink LLC, and Evercore Group L.L.C. are the representatives of the underwriters.

<u>Underwriter</u>	<u>Number of Shares</u>
Cowen and Company, LLC	
SVB Leerink LLC	
Evercore Group L.L.C.	
Oppenheimer & Co. Inc.	
Total	

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel, or modify offers to the public and to reject orders in whole or in part.

Overallotment Option to Purchase Additional Shares. *We have granted to the underwriters an option to purchase up to additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.*

Discounts and Commissions. The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

We estimate that the total expenses of the offering, excluding underwriting discounts, will be approximately \$ _____ and are payable by us. We have also agreed to reimburse the underwriters for expenses of up to \$ _____ related to the clearance of this offering with the Financial Industry Regulatory Authority, Inc.

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		Total	
	Per Share	Without Over Allotment	With Over Allotment
Initial public offering price			
Underwriting discounts and commissions			
Proceeds to AN2 Therapeutics, Inc., before expenses			

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ _____ per share. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

Discretionary Accounts. The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

Market Information. Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In addition to prevailing market conditions, the factors to be considered in these negotiations will include:

- the history of, and prospects for, our company and the industry in which we compete;
- our past and present financial information;
- an assessment of our management;
- our past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

We have applied for the quotation of our common stock on The Nasdaq Global Market under the symbol "ANTX."

Stabilization. In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids, and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising their overallotment option or purchasing shares in the open market.

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- Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member is purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on The Nasdaq Global Market, in the over-the-counter market, or otherwise and, if commenced, may be discontinued at any time.

Lock-Up Agreements. Pursuant to certain “lock-up” agreements, we and our executive officers, directors, and substantially all of our other stockholders, have agreed, subject to certain exceptions, not to (and to not cause or direct any affiliate to) offer, sell, assign, transfer, pledge, contract to sell, lend, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into, or announce the intention to enter into, any swap, hedge or similar agreement or arrangement that transfers, is designed to transfer or reasonably could be expected to transfer, in whole or in part, directly or indirectly, the economic consequence of ownership of, or make any demand or request or exercise any right with respect to the registration of, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of the representatives for a period of 180 days after the date of the pricing of the offering.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit us, among other things and subject to restrictions, to: (a) issue common stock or options pursuant to employee benefit plans, (b) issue common stock upon exercise of outstanding options or warrants, or (c) file registration statements on Form S-8.

The exceptions permit our executive officers, directors, and shareholders, as parties to the “lock-up” agreements, among other things and subject to restrictions, to: (a) make certain gifts, (b) make transfers by will or intestate succession, (c) if the party is a corporation, partnership, limited liability company or other business entity, make transfers to any stockholders, partners, members of, or owners of similar equity interests in, the party, or to an affiliate of the party, if such transfer is not for value, (d) if the party is a corporation, partnership, limited liability company or other business entity, make transfers in connection with the sale or transfer of all of the party's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or

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substantially all of the party's assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by the "lock-up" agreement, (e) enter into transactions relating to shares of common stock acquired in open market transactions after completion of this offering, provided that no public announcement or filing is made regarding such transaction during the 180-day lock-up period, (f) enter into a 10b5-1 trading plan, provided that such plan does not permit the sale of any common stock during the 180-day lock-up period and no public announcement or filing is made regarding such plan during the 180-day lock-up period, and (g) make transfers to us to satisfy tax withholding obligations pursuant to our equity incentive plans disclosed in this prospectus.

The representatives, in their sole discretion, may release our common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release our common stock and other securities from lock-up agreements, the representatives will consider, among other factors, the holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time of the request. In the event of such a release or waiver for one of our directors or officers, the representatives shall provide us with notice of the impending release or waiver at least three business days before the effective date of such release or waiver and we will announce the impending release or waiver by issuing a press release at least two business days before the effective date of the release or waiver.

Electronic Offer, Sale, and Distribution of Shares. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking, and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

Selling Restrictions

Canada. The common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

European Economic Area. In relation to each Member State of the European Economic Area (each, a Relevant State), no shares of common stock have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares of common stock which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares of common stock may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or
- in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares of common stock shall require our company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares of common stock or to whom any offer is made will be deemed to have represented, acknowledged, and agreed to and with each of the underwriters and our company that it is a “qualified investor” within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares of common stock being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged, and agreed that the shares of common stock acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares of common stock to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares of common stock in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe for any shares of common stock, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

United Kingdom. No shares of common stock 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 of common stock which has been approved by the Financial Conduct Authority, except that the shares of common stock may be offered to the public in the United Kingdom at any time:

- to any legal entity which is a qualified investor as defined under Article 2 of the U.K. Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the U.K. Prospectus Regulation), subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or
- in any other circumstances falling within Section 86 of the FSMA,

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provided that no such offer of the shares of common stock shall require our company or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the U.K. Prospectus Regulation. For the purposes of this provision, the expression an “offer to the public” in relation to the shares of common stock in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe for any shares of common stock and the expression “U.K. Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018. In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the U.K. Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the “Order,” and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons. Any person in the United Kingdom who is not a relevant person must not act on or rely upon this document or any of its contents.

Switzerland. The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

Israel. In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728 – 1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728–1968, including, inter alia, if: (i) the offer is made, distributed, or directed to not more than 35 investors, subject to certain conditions (Addressed Investors); or (ii) the offer is made, distributed, or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions (Qualified Investors). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. Our company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute this prospectus or make, distribute, or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a condition to be offered common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock; (iv) that the shares of common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor’s name, address and passport number or Israeli identification number.

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We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on our behalf, other than offers made by the underwriters and their respective affiliates, with a view to the final placement of the securities as contemplated in this document. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of shares on our behalf or on behalf of the underwriters.

LEGAL MATTERS

The validity of the shares of our common stock being offered in this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Davis Polk & Wardwell LLP, Menlo Park, California.

EXPERTS

The financial statements as of December 31, 2019 and 2020 and for each of the years in the period ended December 31, 2020 included in this Prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

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.an2therapeutics.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.

AN2 THERAPEUTICS, INC.
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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of AN2 Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of AN2 therapeutics, Inc. (the "Company") as of December 31, 2020 and 2019, and the related statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders' deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
San Jose, California
September 24, 2021

We have served as the Company's auditor since 2021.

AN2 Therapeutics, Inc.

Balance Sheet
(in thousands, except share amounts)

	As of December 31,	
	2019	2020
Assets:		
Current assets:		
Cash	\$ 5,598	\$ 4,070
Prepaid expenses and other current assets	102	164
Total current assets	<u>5,700</u>	<u>4,234</u>
Total assets	<u>\$ 5,700</u>	<u>\$ 4,234</u>
Liabilities, redeemable convertible preferred stock and stockholders' deficit:		
Current liabilities:		
Accounts payable	\$ 51	\$ 132
Accrued compensation	–	426
Accrued liabilities	108	887
Options subject to repurchase, short-term	–	14
Total current liabilities	<u>159</u>	<u>1,459</u>
Options subject to repurchase, long-term	–	24
Redeemable convertible preferred stock tranche liability	<u>728</u>	<u>–</u>
Total liabilities	<u>887</u>	<u>1,483</u>
Commitments and contingencies (Note 6)		
Redeemable convertible preferred stock, \$0.00001 par value; 2,590,000 shares authorized at December 31, 2019 and 2020; 1,838,331 and 2,582,403 shares issued and outstanding at December 31, 2019 and 2020, respectively; aggregate liquidation preference of \$11,111 and \$16,549 at December 31, 2019 and 2020, respectively	10,614	23,070
Stockholders' deficit:		
Common stock, \$0.00001 par value; 5,000,000 shares authorized at December 31, 2019 and 2020; 1,085,000 and 1,150,679 shares issued and outstanding at December 31, 2019 and 2020, respectively	–	–
Accumulated deficit	<u>(5,801)</u>	<u>(20,319)</u>
Total stockholders' deficit	<u>(5,801)</u>	<u>(20,319)</u>
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	<u>\$ 5,700</u>	<u>\$ 4,234</u>

The accompanying notes are an integral part of these financial statements.

AN2 Therapeutics, Inc.**Income Statements**
(in thousands, except share and per share amounts)

	Years Ended December 31,	
	2019	2020
Operating expenses:		
Research and development	\$ 187	\$ 5,366
Research and development—related party	4,702	653
General and administrative	289	1,265
Total operating expenses	<u>5,178</u>	<u>7,284</u>
Loss from operations	(5,178)	(7,284)
Interest income	—	3
Other expense	(457)	(6,322)
Net loss	<u>(5,635)</u>	<u>(13,603)</u>
Accretion to redemption value and cumulative dividends on preferred stock	(99)	(981)
Net loss attributable to common stockholders	<u>\$ (5,734)</u>	<u>\$ (14,584)</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (5.29)</u>	<u>\$ (13.36)</u>
Weighted-average number of shares used in computing net loss per share, basic and diluted	1,085,000	1,091,678

The accompanying notes are an integral part of these financial statements.

AN2 Therapeutics, Inc.
Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit
(in thousands, except share amounts)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balances at January 1, 2019	–	\$ –	1,085,000	\$ –	\$ –	\$ (67)	\$ (67)
Issuance of Series A redeemable convertible preferred stock at \$5.99 per share for cash, net of issuance costs of \$134	1,371,955	8,084	–	–	–	–	–
Issuance of Series A redeemable convertible preferred stock at a fair value of \$5.79 per share in conjunction with vesting of equity instruments granted in the Anacor License	466,376	2,702	–	–	–	–	–
Redeemable convertible preferred stock tranche liability	–	(271)	–	–	–	–	–
Accretion to redemption value and cumulative dividends on preferred stock	–	99	–	–	–	(99)	(99)
Net loss	–	–	–	–	–	(5,635)	(5,635)
Balances at December 31, 2019	<u>1,838,331</u>	<u>10,614</u>	<u>1,085,000</u>	<u>–</u>	<u>–</u>	<u>(5,801)</u>	<u>(5,801)</u>
Issuance of Series A redeemable convertible preferred stock at \$5.99 per share for cash, net of issuance costs of \$10	631,384	3,772	–	–	–	–	–
Issuance of Series A redeemable convertible preferred stock at a fair value of \$5.79 per share in conjunction with vesting of equity instruments granted in the Anacor License	112,688	653	–	–	–	–	–
Settlement of redeemable convertible preferred stock tranche liability	–	7,050	–	–	–	–	–
Issuance of common stock upon exercise of stock options	–	–	65,679	–	–	–	–
Vesting of early exercised stock options	–	–	–	–	26	–	26
Stock-based compensation	–	–	–	–	40	–	40
Accretion to redemption value and cumulative dividends on preferred stock	–	981	–	–	(66)	(915)	(981)
Net loss	–	–	–	–	–	(13,603)	(13,603)
Balances at December 31, 2020	<u>2,582,403</u>	<u>\$23,070</u>	<u>1,150,679</u>	<u>\$ –</u>	<u>\$ –</u>	<u>\$ (20,319)</u>	<u>\$ (20,319)</u>

The accompanying notes are an integral part of these financial statements.

AN2 Therapeutics, Inc.

Statement of Cash Flows
(in thousands)

	Years Ended December 31,	
	2019	2020
Cash flows from operating activities:		
Net loss	\$(5,635)	\$(13,603)
Adjustments to reconcile net loss to net cash used in operating activities:		
Non-cash research and development expense in connection with a license agreement	2,702	653
Stock-based compensation expense	–	40
Change in fair value of redeemable convertible preferred stock tranche liability	457	6,322
Changes in operating assets and liabilities:		
Increase in prepaid expenses and other assets	(102)	(62)
(Decrease) increase in accounts payable	(16)	81
Increase in accrued compensation	–	426
Increase in accrued liabilities	108	779
Net cash used in operating activities	<u>(2,486)</u>	<u>(5,364)</u>
Cash flows from financing activities:		
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	8,084	3,772
Proceeds from exercise of stock options	–	64
Net cash provided by financing activities	<u>8,084</u>	<u>3,836</u>
Net increase (decrease) in cash	5,598	(1,528)
Cash at beginning of period	–	5,598
Cash at end of period	<u>\$ 5,598</u>	<u>\$ 4,070</u>
Supplemental disclosure of noncash financing items:		
Issuance of redeemable convertible preferred stock in connection with a license agreement	\$ 2,702	\$ 653
Accretion to redemption value and cumulative dividends on preferred stock	99	981
Redeemable convertible preferred stock tranche liability	271	–

The accompanying notes are an integral part of these financial statements.

AN2 Therapeutics, Inc.

Notes to Financial Statements

1. The Company

Description of Business

AN2 Therapeutics, Inc. (the "Company") is a biopharmaceutical company focused on developing novel medicines for patients with rare, orphan infectious diseases that represent significant unmet needs, specifically its initial product candidate, epetraborole, an antibiotic initially under development as a once-daily, oral treatment for patients with chronic non-tuberculosis mycobacterial lung disease. The Company was incorporated in the state of Delaware in February 2017, began operations in November 2019, and is based in Menlo Park, California.

Since launching operations in November 2019, the Company has devoted substantially all of its resources to performing research and development activities, including with respect to its initial product candidate, epetraborole, business planning, hiring personnel, raising capital and providing general and administrative support for these operations.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, protection of proprietary technology, dependence on key personnel, contract manufacturing and contract research organizations, compliance with government regulations and the need to obtain additional financing to fund operations. The Company's initial product candidate currently under development will require significant additional research and development efforts, including additional clinical trials and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance and reporting.

The Company's initial product candidate is in development. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's in-licensed intellectual property will be obtained or maintained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from other pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees, consultants and other third parties.

Liquidity

The Company's operations have historically been financed through the issuance of redeemable convertible preferred stock. Since inception, the Company has incurred significant losses and negative net cash flows from operations. During the year ended December 31, 2020, the Company incurred a net loss of \$13.6 million and had negative net cash flows from operating activities of \$5.4 million. The Company has an accumulated deficit as of December 31, 2020 of \$20.3 million and will require substantial additional capital for research and development activities. The Company anticipates incurring additional losses until such time, if ever, that it can generate significant sales of its product candidate currently in development.

Management believes that its cash, including the net cash proceeds of \$79.7 million from issuance of its Series B redeemable convertible preferred stock in March 2021 (see Footnote 15) are sufficient to continue operating activities for at least 12 months following the issuance date of these financial

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statements. Future capital requirements will depend on many factors, including the timing and extent of spending on research and development, including costs for preclinical and nonclinical studies, clinical trials and clinical trial material manufacturing. There can be no assurance that, in the event the Company requires additional financing, such financing will be available at terms acceptable to the Company if at all. Failure to generate sufficient cash flows from operations, raise additional capital, and reduce discretionary spending should additional capital not become available could have a material adverse effect on the Company's ability to achieve its intended business objectives.

Other Risks and Uncertainties

The Company is subject to a number of risks similar to those of other clinical-stage biopharmaceutical companies, including, but not limited to: dependence on key individuals, the need to develop commercially viable therapeutics, competition from other companies, many of which are larger and better capitalized, protection of intellectual property rights, litigation or claims against the Company based on intellectual property rights, regulatory clearance, market acceptance of the Company's products and the need to obtain adequate additional financing to fund the development of its products.

In March 2020, the World Health Organization declared the global novel coronavirus disease ("COVID-19") outbreak a pandemic. To date, the Company's business has not been materially impacted by the COVID-19 pandemic. However, the Company has experienced certain slowing of its preclinical trials and cannot at this time predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its financial condition and operations, including ongoing and planned preclinical and nonclinical studies, clinical trials and clinical trial material manufacturing. The impact of the COVID-19 pandemic on the financial performance of the Company will depend on future developments, including the duration and spread of the outbreak and related governmental advisories and restrictions. These developments and the impact of COVID-19 on the financial markets and the overall economy are highly uncertain. If the financial markets and/or the overall economy are impacted for an extended period, the Company's results may be adversely affected.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's financial statements have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP").

Segments

The Company operates and manages its business as one reportable and operating segment. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on a company-wide basis for purposes of allocating resources and assessing financial performance.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to research and development accruals, fair value of assets and liabilities, and the fair value of common stock and stock-based compensation. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Research and Development Expenses

All research and development costs, including work performed by third parties, are expensed as incurred. Research and development costs consist of salaries and other personnel-related expenses, including associated stock-based compensation, consulting fees, and facility costs, as well as fees paid to other entities that conduct certain research and development activities on behalf of the Company. Payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods are received or services are rendered.

As part of the process of preparing its financial statements, the Company estimates its accrued expenses. This process involves reviewing quotations and contracts, identifying services that have been performed on the Company's behalf and estimating the level of services performed and the associated cost incurred for services for which the Company has not yet been invoiced or otherwise notified of the actual cost. The majority of the Company's service providers invoice monthly in arrears for services performed or when contractual milestones are met. The Company makes estimates of its accrued expenses at the end of each reporting period based on the facts and circumstances known to the Company at that time. The significant estimates in the Company's accrued research and development expenses relate to expenses incurred with respect to contract manufacturing and research organizations, academic research centers and other vendors in connection with research and development activities for which the Company has not yet been invoiced.

Redeemable Convertible Preferred Stock

The Company records the redeemable convertible preferred stock at fair value on the dates of issuance, net of issuance costs. Upon the occurrence of certain events that are outside the Company's control, including a deemed liquidation event, holders of the redeemable convertible preferred stock can cause redemption for cash. Therefore, the redeemable convertible preferred stock is classified outside of stockholders' deficit on the balance sheet.

The carrying value of the redeemable convertible preferred stock will be adjusted to its redemption value if and when it becomes probable that such a redemption event will occur. Since the holders of the redeemable convertible preferred stock have the right to request the Company to redeem their shares of the redeemable convertible preferred stock after seven years of the issuance, it is probable that the redeemable convertible preferred stock becomes redeemable at the current reporting date. Therefore, the carrying value of the redeemable convertible stock has been accreted to its redemption value.

Redeemable Convertible Preferred Stock Tranche Liability

The redeemable convertible preferred stock issued in November 2019 contained an embedded feature that provides the investors the ability to participate in a second close of the Series A at the same price upon the attainment of a specific milestone. The obligation to issue additional shares of Series A redeemable convertible preferred stock at a future date was determined to be a freestanding instrument that should be accounted for as a liability. At initial recognition, the Company recorded the redeemable convertible preferred stock tranche liability on the balance sheets at its estimated fair value. The redeemable convertible preferred stock tranche liability is subject to remeasurement at each subsequent reporting date, with changes in fair value recognized as a component of other expense. Immediately prior to the settlement of the redeemable convertible preferred stock tranche financing occurring in October 2020, the Company remeasured the redeemable convertible preferred stock tranche liability, with the change in fair value recognized as a component of other expense. The redeemable convertible preferred stock tranche liability was then reclassified to the redeemable convertible preferred stock.

Stock-Based Compensation

The Company measures and recognizes compensation expense for equity-classified stock-based awards made to employees, directors and non-employees based on the grant date estimated fair value of each award. Compensation expense for employee and director awards is recognized on a straight-line basis over the requisite service period which is generally the vesting period for the entire award. Expense is adjusted for forfeitures as they occur. Compensation expense for non-employee awards is recognized in the same period and manner as if the Company had paid cash for the goods or services provided.

The valuation model used for calculating the fair value of stock options for stock compensation expense is the Black-Scholes option-pricing model (the Black-Scholes model). The Black-Scholes model requires management to make assumptions and judgments about the variables used in the calculation, including the expected term, the expected volatility of common stock, an assumed risk-free interest rate, and expected dividends the Company may pay. Management elected to apply the practical expedient for private companies and used the simplified method to determine the awards' expected term. Volatility is based on an average of the historical volatilities of the common stock of entities with characteristics similar to the Company's. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option. The Company uses an assumed dividend yield of zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock.

For awards that contain performance conditions, compensation cost is recognized in the period in which it becomes probable that the performance condition will be satisfied. The grant date fair value of these awards is equal to the fair value of the underlying shares as determined by the price other investors paid for such shares in recent transactions. For awards that vest upon a liquidity event or a change in control, the performance condition is not probable of being achieved until the event occurs. As a result, no compensation expense would be recognized until the performance-based vesting condition is achieved.

Fair Value of Common Stock

The absence of an active market for the Company's common stock requires the Company's board of directors to determine the fair value of its common stock for purposes of granting stock options. The fair value of the Company's common stock is determined by the Company's board of directors with assistance from management and an independent third-party valuation firm. Management's approach to estimating the fair value of the Company's common stock is consistent with the methods outlined in the American Institute of Certified Public Accountants' Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Determining the best estimated fair value of the Company's common stock requires significant judgement and management considers several factors, including the Company's stage of development, equity market conditions affecting comparable public companies, significant milestones and progress in research and development efforts.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. As of December 31, 2019 and 2020, the Company had no cash equivalents.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, which is invested through a financial institution in the United States. Such deposits may be in excess of federally insured limits. The Company has not experienced any credit losses in such accounts and does not believe it is exposed to any significant credit risk on these funds.

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The Company is exposed to credit risk in the event of a default by the financial institution holding its cash to the extent recorded on the balance sheets. Through December 31, 2020, the Company has no off-balance sheet concentrations of credit risk.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates that will be in effect when the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

The Company recognizes and measures uncertain tax positions using a two-step approach set forth in authoritative guidance. The first step is to evaluate the tax position taken or expected to be taken by determining whether the weight of available evidence indicates that it is more likely than not that the tax position will be sustained in an audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. Significant judgment is required to evaluate uncertain tax positions. The Company evaluates uncertain tax positions on a regular basis. The evaluations are based on a number of factors, including changes in facts and circumstances, changes in tax law, correspondence with tax authorities during the course of the audit, and effective settlement of audit issues. The provision for income taxes includes the effects of any accruals that the Company believes are appropriate. It is the Company's policy to recognize interest and penalties related to income tax matters in income tax expense. Through December 31, 2020, the Company had not accrued interest or penalties related to uncertain tax positions.

On March 18, 2020, the Families First Coronavirus Response Act ("FFCR Act"), and on March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") were each enacted in response to the COVID-19 pandemic. The FFCR Act and the CARES Act contain numerous income tax provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property.

On June 29, 2020, Assembly Bill 85 ("A.B. 85") was signed into California law. A.B. 85 provides for a three-year suspension of the use of net operating losses for medium and large businesses and a three-year cap on the use of business incentive tax credits to offset no more than \$5.0 million of tax per year. A.B. 85 suspends the use of net operating losses for taxable years 2020, 2021 and 2022 for certain taxpayers with taxable income of \$1.0 million or more. The carryover period for any net operating losses that are suspended under this provision will be extended. A.B. 85 also requires that business incentive tax credits including carryovers may not reduce the applicable tax by more than \$5.0 million for taxable years 2020, 2021 and 2022.

The FFCR Act, CARES Act and A.B. 85 did not have a material impact on the Company's financial statements as of December 31, 2020; however, the Company continues to examine the impacts the FFCR Act, CARES Act and A.B. 85 may have on its business, results of operations, financial condition, liquidity and related disclosures.

Comprehensive Loss

Comprehensive loss includes net loss and certain changes in stockholders' deficit that are excluded from net loss. The Company has no items of comprehensive income or loss at December 31, 2019 and 2020.

Net Loss Per Share

Basic net loss per share attributable to common stockholders 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 for potentially dilutive securities. Diluted net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, redeemable convertible preferred stock, stock options, common stock subject to repurchase related to unvested early exercise of stock options are considered to be potentially dilutive securities. Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities as the redeemable convertible preferred stock is considered a participating security because it participates in dividends with common stock. The Company also considers the shares issued upon the early exercise of stock options subject to repurchase to be participating securities because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The holders of all series of redeemable convertible preferred stock and the holders of early exercised shares subject to repurchase do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per share is the same as basic net loss per share for those periods because the impact of potentially dilutive securities would be anti-dilutive.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09") and has subsequently issued a number of amendments to Topic 606. As amended, Topic 606 provides a single comprehensive model to be used in the accounting for revenue arising from contracts with customers and supersedes current revenue recognition guidance, including industry-specific guidance. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. Topic 606 also requires entities to disclose both qualitative and quantitative information that enables users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers, including disclosure of significant judgments affecting the recognition of revenue. The Company adopted ASU 2014-09 effective January 1, 2019. The adoption did not have a material impact on the Company's financial statements as the Company did not recognize revenue during the period presented.

In June 2018, the FASB issued ASU No. 2018-07, Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07"). ASU 2018-07 amends the FASB ASC to expand the scope of FASB ASC Topic 718, Compensation-Stock Compensation, to include accounting for share-based payment transactions for acquiring goods and services from non-employees. The amendments in ASU 2018-07 are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2018. Early adoption was permitted. The Company adopted this guidance effective January 1, 2019. The adoption did not have a material impact on the Company's financial statements.

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740), which simplifies the accounting for income taxes, primarily by eliminating certain exceptions to ASC 740. This standard is effective for fiscal periods beginning after December 15, 2020 for public business entities, and is effective for all other entities for fiscal periods beginning after December 15, 2021. Early adoption is permitted. The Company adopted this guidance effective January 1, 2019. The adoption did not have a material impact on the Company's financial statements.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement (“ASU 2018-13”). The amendments on changes in unrealized gains and losses recognized in other comprehensive gains and losses recognized in other comprehensive income categorized within Level 3, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. The Company adopted ASU 2018-13 as of January 1, 2020, which did not have a material impact on its financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements (“ASU 2018-11”). ASU 2018-11 provided an alternative method in addition to the modified retrospective transition method for ASU No. 2016-02, Leases: Amendments to the FASB Accounting Standards Codification (“ASU 2016-02”), issued in February 2016. Under ASU 2018-11, an entity may elect to initially apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. Under ASU 2016-02, a lease is required to recognize assets and liabilities with lease terms of more than twelve months. ASU 2016-02 is effective for nonpublic business entities and public entities eligible to be Smaller Reporting Companies for fiscal years beginning after December 15, 2021. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on its financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326) Measurement of Credit Losses on Financial Instruments (“ASU 2016-13”), which requires an entity to utilize a new impairment model known as the current expected credit loss (“CECL”) model to estimate its lifetime “expected credit loss” and record an allowance that, when deducted from the amortized cost basis of the financial assets and certain other instruments, including but not limited to available-for-sale debt securities. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. ASU 2016-13 requires a cumulative effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. In November 2019, the FASB issued ASU 2019-10, Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815) and Leases (Topic 842): Effective Dates, which defers the effective date of ASU 2016-13 to fiscal years beginning after December 15, 2022 for all entities except SEC reporting companies that are not smaller reporting companies. The Company is currently evaluating the impact of the adoption of ASU 2016-13 on its financial statements.

3. Fair Value Measurements

The Company records its financial assets and liabilities at fair value. The accounting guidance for fair value provides a framework for measuring fair value, clarifies the definition of fair value, and expands disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as follows:

- Level I: Inputs which include quoted prices in active markets for identical assets and liabilities.
- Level II: Inputs other than Level I that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

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- Level III: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company's primary financial instruments include cash, prepaid expenses, accounts payable, accrued liabilities and redeemable convertible preferred stock tranche liabilities. The carrying amounts of the Company's financial instruments, other than the redeemable convertible preferred stock tranche liability, approximate fair value due to their relatively short maturities. The Company's has no financial assets or liabilities outside of Level III liabilities, which consist entirely of the redeemable convertible preferred stock tranche liability. The Company's fair value measurement of its redeemable convertible preferred stock tranche liability as of December 31, 2019 was \$0.7 million. The determination of the fair value of the redeemable convertible preferred stock tranche liability is discussed in Note 9.

The following table sets forth the changes in the fair value of Level III liabilities (in thousands):

	Redeemable Convertible Preferred Stock Tranche Liability
Fair value at December 31, 2018	\$ —
Fair value at issuance	271
Change in fair value	457
Fair value at December 31, 2019	728
Change in fair value	6,322
Settlement of redeemable convertible preferred stock tranche liability	(7,050)
Fair value at December 31, 2020	\$ —

4. Collaboration and License Agreements

Anacor Licensing Agreement

In November 2019, the Company entered into an exclusive worldwide license agreement with Anacor Pharmaceuticals, Inc. ("Anacor") for certain compounds and other intellectual property controlled by Anacor for the treatment, diagnosis, or prevention of all human diseases (the "Anacor License"). The Anacor License will expire upon expiration of the last to expire royalty term. Either party may terminate the Anacor License for the other party's material breach following a cure period or immediately upon certain insolvency events relating to the other party. The Company has the right to terminate the agreement at its convenience upon 90-day written notice until the first regulatory approval or one-year notice thereafter. Furthermore, upon termination of the Anacor License for any of the foregoing reasons, the rights and licenses within will terminate.

In exchange for the worldwide, sublicensable, exclusive right and licenses to develop, manufacture, and commercialize the specified compounds, the Company paid Anacor a non-refundable \$2.0 million upfront payment and granted Anacor an aggregate 579,064 shares of Series A redeemable convertible preferred stock. For financial reporting purposes the fair value of the shares was \$5.79 per share for a total of \$3.4 million. The fair value of the shares granted is based on the \$5.99 per share price paid by other investors for issued shares in the Series A financing.

The Series A redeemable convertible preferred stock granted to Anacor is accounted for as non-employee awards and is recognized upon the transfer of the license and upon the Company meeting certain operational milestones as included in the Series A Stock Purchase Agreement. For the years ended December 31, 2019 and 2020, 466,376 and 112,688 shares of Series A redeemable convertible preferred stock with a fair value of \$2.7 million and \$0.7 million, respectively, vested as the related performance and service conditions were satisfied.

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The Company recorded the transaction as an asset acquisition as substantially all of the fair value of the gross assets acquired were concentrated in one of the compounds. The assets acquired in the transaction were measured based on the upfront payment and the fair value of the Series A redeemable convertible preferred stock shares issued to Anacor, as the fair value of the consideration given, \$5.4 million, was more readily determinable than the fair value of the assets received. As the in-process research and development assets have not yet received regulatory approval and have no alternative future use, the fair value of the assets was recorded as research and development expense—related party. The total amounts recorded in the statements of operations for the years ended December 31, 2019 and 2020 were \$4.7 million and \$0.7 million, respectively.

The Company agreed to make further payments to Anacor upon achievement of various development and regulatory milestones and upon achievement of various commercial and sales threshold milestones for an aggregate maximum payment in the low triple-digit millions, and a mid-double digit percentage of royalties received under certain sublicensing arrangements. The Company also agreed to pay Anacor non-refundable, non-creditable sales royalties on a tiered marginal royalty rate based on the country's status as a developing or developed country as defined in the license agreement. Sales royalties are a percentage of net sales, as specified in the Anacor License, and range from mid-single digits for developing countries (as classified by the World Bank) and single to mid-teens for all other countries or the China, Hong Kong, Taiwan and Macau territories, upon reaching a minimum of net sales in the low-teen millions. The sales royalties are required to be paid on a product-by-product and country-by-country basis, until the latest to occur of mid-teen years following the date of first commercial sale of a product, the expiration of all regulatory or data exclusivity, or the date upon of the expiration of the last to expire valid claim of a licensed patent covering such product in such country.

None of the future development, regulatory, commercial or sales milestones or royalty payments were recognized as of December 31, 2019 and 2020.

Brii Biosciences Agreement

In November 2019, the Company entered into a license agreement granting Brii Biosciences Limited the exclusive development and commercialization rights of certain compounds in China, Hong Kong, Taiwan, and Macau for the treatment of human diseases including tuberculosis. The Company did not receive an upfront payment but is eligible to receive up to mid-teen millions of development and regulatory milestones and up to \$150 million in commercial milestones upon achieving sales thresholds. The Company is also entitled to tiered mid-single digits to low-double digits percentage sales-based royalties. Future milestone payments and royalties will be accounted for under ASC 606.

5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	<u>December 31,</u>	
	<u>2019</u>	<u>2020</u>
Prepaid research and development-related expenses	\$ 82	\$115
Prepaid insurance	20	39
Prepaid legal expenses	–	10
Total prepaid expenses and other current assets	<u>\$ 102</u>	<u>\$164</u>

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Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2019	2020
Accrued research and development-related expenses	\$ —	\$887
Accrued legal expenses	108	—
Total accrued liabilities	<u>\$ 108</u>	<u>\$887</u>

6. Commitments and Contingencies

Guarantees and Indemnifications

The Company, as permitted under Delaware law and in accordance with its certification of incorporation, as amended, and bylaws, and pursuant to indemnification agreements with certain of its officers and directors, indemnifies its officers and directors for certain events or occurrences, subject to certain limits, which the officer or director is or was serving at the Company's request in such capacity. The term of the indemnification period lasts as long as an officer or director may be subject to any proceeding arising out of acts or omissions of such officer or director in such capacity. The maximum amount of potential future indemnification is unlimited; however, the Company currently holds director and officer liability insurance. This insurance limits the Company's exposure and may enable it to recover a portion of any future amounts paid. The Company believes that the fair value of these indemnification obligations is minimal. Accordingly, the Company has not recognized any liabilities relating to these obligations for any period presented.

Adjuvant Global Health Agreement

In conjunction with Adjuvant Global Health Technology Fund L.P.'s ("Adjuvant") investment in the Company's Series A redeemable convertible preferred stock financing in November 2019, the Company entered into a Global Health Agreement with Adjuvant, pursuant to which the Company agreed to support the creation of innovative and affordable drugs to treat disease, through public health programs and private purchasers in Low and Low-Middle-Income Countries (as such terms are defined by the World Bank and in the agreement). Adjuvant purchased a total of 834,724 shares of the Company's Series A redeemable convertible preferred stock in 2019 and 2020 for a total investment of \$5.0 million.

Adjuvant's investment supports the development of the Company's product candidate, epetraborole, for use in melioidosis-endemic and melioidosis-at-risk countries as defined in the agreement. These global access commitments became effective as of the Series A redeemable convertible preferred stock financing closing date and will remain in effect until the latter that Adjuvant ceases to be a shareholder of the Company or, ten years following epetraborole approval for melioidosis by a regulatory authority.

The Global Health Agreement contains various affirmative and negative covenants agreed to by the Company, including its use of reasonably diligent endeavors to develop the agreed-upon products using non-dilutive funding and make accessible to people in need in the target countries so long as the Company does not sell products at a loss. If the Company does not maintain compliance with the covenants, Adjuvant may be entitled to repayment for any portion of its investment that is not used for the purposes outlined in the Global Health Agreement. The Company has complied with all applicable covenants as of December 31, 2020.

7. Common Stock

The Company's certificate of incorporation, as amended, authorizes the Company to issue 5,000,000 shares of \$0.00001 par value common stock. Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders of the Company.

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Subject to the preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors. No dividends have been declared to date.

Common shares reserved for future issuance, on an as-if-converted basis, as of December 31, 2019 and 2020, consists of the following:

	December 31,	
	2019	2020
Series A redeemable convertible preferred stock	1,838,331	2,582,403
Stock options, issued and outstanding	—	127,343
Stock options, authorized for future issuance	155,459	—
Total	1,993,790	2,709,746

8. Redeemable Convertible Preferred Stock

Series A Equity Financing

The Company's Certificate of Incorporation, as amended, authorizes the Company to issue 2,590,000 shares of redeemable convertible preferred stock with a par value of \$0.00001 per share.

From November 2019 through October 2020, the Company issued a total of 2,003,339 shares of Series A redeemable convertible preferred stock ("Series A") at \$5.99 per share for gross proceeds of \$12.0 million, and issued 579,064 shares of Series A redeemable convertible preferred stock pursuant to the license agreement between the Company and Anacor, as follows:

The Company entered into a Series A preferred stock purchase agreement (Series A Preferred Stock Purchase Agreement) with certain investors on November 20, 2019 and upon approval by the Company's Board of Directors, the Company completed the first tranche of a Series A redeemable convertible preferred stock financing (Series A—First Tranche) at a price per share of \$5.99 for cash. The Company also entered into a license agreement arrangement to license certain compounds and obtain rights to develop, manufacture and commercialize assets acquired under the agreement. An additional 466,376 shares of Series A redeemable convertible preferred stock were issued to Anacor under that certain license agreement (see Note 4). The net cash proceeds from this first tranche of financing totaled \$8.1 million and 1,371,955 shares of Series A redeemable convertible preferred stock were issued. Issuance costs totaled \$0.1 million and were recorded as a reduction of the proceeds.

On October 2, 2020, upon achievement of certain research and development milestones outlined in the Series A Preferred Stock Purchase Agreement and upon approval by the Company's Board of Directors, the Company completed a second tranche of the Series A redeemable convertible preferred stock financing (Series A—Second Tranche) at a price per share of \$5.99 for cash. The net cash proceeds from this second tranche of financing totaled \$3.8 million, and 631,384 shares of Series A redeemable convertible preferred stock were issued. An additional 112,688 shares of Series A redeemable convertible preferred stock were issued to Anacor under that certain license agreement (see Note 4). Issuance costs total \$0.01 million and were recorded as a reduction of the proceeds.

At December 31, 2019, redeemable convertible preferred stock consisted of the following (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued and Outstanding	Issuance Price Per Share	Carrying Value	Liquidation Preference
Series A	2,590,000	1,838,331	\$ 5.99	\$10,614	\$ 11,111

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At December 31, 2020, redeemable convertible preferred stock consisted of the following (in thousands, except share and per share amounts):

	<u>Shares Authorized</u>	<u>Shares Issued and Outstanding</u>	<u>Issuance Price Per Share</u>	<u>Carrying Value</u>	<u>Liquidation Preference</u>
Series A	2,590,000	2,582,403	\$ 5.99	\$23,070	\$ 16,549

The rights, preferences, and privileges of the redeemable convertible preferred stock are as follows:

Redemption Rights

Upon the occurrence of certain liquidation events, as well as upon a written request by at least two-thirds of the holders of the Series A redeemable convertible preferred stock on or after the seventh anniversary of the Series A original issue date, redeemable convertible preferred stock must be redeemed by the Company at a price of \$5.99 per share plus any accrued dividends (whether or not declared) in three annual installments. During the years ended December 31, 2019 and 2020, the Company accreted \$0.1 million and \$1.0 million, respectively, to the redemption value of the redeemable convertible preferred stock representing cumulative dividends.

Dividends Rights

Cumulative dividends of \$0.4792 per share per annum for each Series A redeemable convertible preferred stock are payable when and as declared by the Company's Board of Directors, or upon the occurrence of a liquidation event or upon a contingent mandatory conversion of the Series A redeemable convertible preferred stock in connection with a qualified initial public offering as described below. The Series A original issue price is \$5.99. The original issue price is subject to adjustment in the event of any share dividend, share split, combination, consolidation or other recapitalization. The dividends shall accrue from day to day from the issue date of the Series A redeemable convertible preferred stock whether or not declared and shall be cumulative. In addition, the Series A redeemable convertible preferred stock participates on an as-converted basis in any dividends payable to ordinary shareholders. Cumulative dividends for the years ended December 31, 2019 and 2020 were \$0.1 million and \$1.1 million, respectively. No dividends have been declared or paid since the initial issuance of redeemable convertible preferred shares through December 31, 2020.

Liquidation Rights

In the event of liquidation, dissolution or winding up of the Company, merger or a reduction of capital through the sale or lease of all or a substantial part of the business of the Company, before any distribution or payment shall be made to the holders of ordinary shares, the holders of preferred shares shall be entitled to be paid an amount in cash equal to the original issue price (subject to adjustment in the event of any share dividend, share split, combination, or other recapitalization) plus all dividends accumulated and unpaid thereon. First, the holders of the preferred shares are paid in full the amounts as specified on a pro-rata basis; then, after holders of the preferred shares are satisfied, any remaining amounts shall be distributed on a pro-rata basis to the holders of the common shares.

Voting Rights

Except as otherwise required by law, the holders of common and Series A redeemable convertible preferred stock vote together as a single class. The holders of the redeemable convertible preferred stock are entitled to the number of votes equal to the number of shares of common stock into which the redeemable convertible preferred stock could be converted on the record date for the vote, or upon the written consent of the stockholders.

The holders of the Series A redeemable convertible preferred stock are entitled to elect two directors of the Company and the holders of common stock shall be entitled to elect two directors of the Company.

Optional Conversion

Each share of redeemable convertible preferred stock shall be convertible, at the option of the holder, into such number of fully paid shares of common stock as is determined by dividing the original issue price by the conversion price in effect at the time of conversion. As of December 31, 2019 and 2020, the initial conversion price per share of redeemable convertible preferred stock is equivalent to the original issue price and as such converts on a one-for-one basis prior to any adjustments.

The respective applicable conversion price is subject to adjustment upon any future stock splits or stock combinations, reclassifications or exchanges of similar stock, upon a reorganization, merger or consolidation of the Company, or upon the issuance or sale by the Company of common stock for consideration less than the applicable conversion price.

Mandatory Conversion

Each share of Series A redeemable convertible preferred stock automatically converts into the number of shares of common stock determined in accordance with the conversion rate upon the earlier of (a) the closing of an initial public offering in at a price per share of common stock at least equal to \$17.97 (as may be adjusted for stock splits, reverse splits, stock dividends, combinations, and other recapitalizations) resulting in at least \$50 million of net proceeds to the Company after deducting underwriters commissions and expenses or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least two-thirds of the outstanding shares of Series A redeemable convertible preferred stock, then (i) all outstanding shares of redeemable convertible preferred stock shall automatically be converted into shares of Common Stock at the then effective conversion rate and (ii) such shares may not be reissued by the Company. Through December 31, 2020, the Company has sufficient authorized and unissued common shares available to settle any conversion event.

9. Redeemable Convertible Preferred Stock Tranche Liability

The Company's obligation to issue additional shares of its redeemable convertible preferred stock represents a freestanding financial instrument (see Note 2 and Note 3). The freestanding redeemable convertible preferred stock tranche liability is initially recorded at fair value, with fair value changes recognized as increases or reductions in other expense in the statements of operations. The Company continued to adjust the liability for changes in the estimated fair value until the settlement of the redeemable convertible preferred stock tranche liability. At such time, any remaining value of the redeemable convertible preferred stock tranche liability was reclassified to redeemable convertible preferred stock with no further remeasurement required. The Company had recorded a redeemable convertible preferred stock tranche liability in November 2019 of \$0.3 million related to the Series A redeemable convertible preferred stock financing.

The Company estimated the fair value of the redeemable convertible preferred stock tranche liability using a Black-Scholes option pricing model using the following:

- **Expected term**—The expected term represents the period for which the redeemable convertible preferred stock tranche liabilities are expected to be outstanding, which is estimated to be the remaining contractual term.
- **Expected volatility**—The volatility data was estimated based on a study of publicly traded industry peer companies, as there is no trading history for the Company's redeemable convertible preferred stock. For purposes of identifying these comparable peer companies, the

Company considered the industry, stage of development, size and financial leverage. The Company has measured historical volatility over a period equivalent to the expected term and believes that historical volatility provides a reasonable estimate of future expected volatility.

- **Expected dividends**—The Black-Scholes option pricing model calls for a single expected dividend yield as an input. The Company currently has no history or expectation of paying cash dividends on its preferred stock.
- **Risk-free interest rate**—The risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon issues similar in duration to the expected term of the redeemable convertible preferred stock tranche liability.

The Black-Scholes option pricing model resulted in a tranche liability of \$0.3 million using the following assumptions: estimated equity value of \$14.7 million, a term of 3.5 years, a risk-free rate of 1.59%, a volatility of 82.4%, and a dividend yield of 0.0%.

The redeemable convertible preferred stock tranche liability was remeasured as of December 31, 2019 with the following assumptions: estimated equity value was \$19.0 million, a term of 3.5 years, a risk-free rate of 1.56%, a volatility of 89.3% and a dividend yield of 0.0% resulting in a fair value of approximately \$0.7 million. The Company recorded the change in fair value of approximately \$0.5 million as other expense in the statements of operations for the year ended December 31, 2019.

The redeemable convertible preferred stock tranche liability was settled in October 2020 at the time of the tranche closing of the Series A redeemable convertible preferred stock and the remeasured liability balance of \$7.1 million was reclassified to redeemable convertible preferred stock. The final closing fair value was remeasured with the following assumptions: estimated equity value was \$63.0 million, a term of 4.1 years, a risk-free rate of 0.23%, a volatility of 112.3% and a dividend yield of 0.0%. The Company recorded the change in fair value of \$6.3 million in other expense in the statements of operations for the year ended December 31, 2020.

10. Equity Incentive Plan and Stock-Based Compensation

2017 Equity Incentive Plan

In February 2017, the Board of Directors approved the 2017 Equity Incentive Plan (the Plan). Under the Plan, 293,022 shares of common stock have been reserved for the issuance of ISOs, NSOs, and rights to acquire restricted stock to employees, officers, directors, and consultants of the Company as of December 31, 2020. The Plan allows for the issuance of non-statutory and incentive stock options (ISOs) to employees and non-statutory stock options (NSOs) to non-employees. ISOs and NSOs may be granted with exercise prices at no less than 100% of the fair value of the common stock on the date of grant. Options granted to a 10% stockholder shall be at no less than 110% of the fair value, and ISO stock option grants to such 10% stockholders expire five years from the date of grant.

The Company permits early exercise of certain stock options prior to vesting to certain directors, officers, and employees. Any shares issued pursuant to unvested options are restricted and subject to repurchase by the Company until the conditions for vesting are met. The amounts paid for shares purchased under an early exercise of stock options and subject to repurchase by the Company are reported as options subject to repurchase, short and long-term on the balance sheet and is reclassified to common stock and additional paid-in capital as such shares vest. Upon termination of employment of an option holder, the Company has the right to repurchase, at the original purchase price, any unvested options. The shares issued pursuant to unvested options have been included in shares issued and outstanding on the balance sheet and statement of stockholders' equity as such shares are not considered outstanding for accounting purposes.

ISOs granted under the Plan generally vest 25% after the completion of 12 months of service, and the balance vests in equal monthly installments over the next 36 months of service and expire 10 years

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from the grant date, unless subject to provisions regarding 10% stockholders. NSOs vest in accordance with the terms of the specific agreement under which the options were provided and expire 10 years from the date of grant.

Valuation of Stock Options

The Company estimated the fair value of stock options using the Black-Scholes option pricing model. The fair value of employee and non-employee stock options is being amortized on the straight-line basis over the requisite service period of the awards.

The Black-Scholes option pricing model requires the use of highly subjective assumptions which determine the fair value of stock-based awards. These assumptions include:

- **Risk-free interest rate**—The risk-free interest rate is based on the U.S. Treasury zero-coupon issues in effect at the time of grant for periods corresponding with the expected term of option.
- **Expected volatility**—Since the Company is privately-held and does not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle and area of specialty.
- **Expected term**—The expected term represents the period that stock-based awards are expected to be outstanding. The expected term for option grants is determined using the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual term of the stock-based awards.
- **Expected dividends**—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

For options granted to non-employee consultants, the fair value of these options is also remeasured using the Black-Scholes option pricing model reflecting the same assumptions as applied to employee options in each of the reported periods, other than the expected term, which is assumed to be the remaining contractual term of the option.

The fair value of stock options granted to employees, directors and non-employees was estimated using the following weighted-average assumptions:

	Year Ended December 31, 2020
Expected dividend yield	—
Expected term	5.82 years
Risk-free interest rate	1.29%
Expected volatility	79.1%

Management's calculations are based on a grant date valuation approach. Using the Black-Scholes model, the weighted-average grant-date fair value per share for options granted during the year ended December 31, 2020 was \$0.67. No options were granted during the year ended December 31, 2019.

[Table of Contents](#)**Stock Option Plan Activity**

A summary of the stock plan activity is as follows:

	Options Available for Grant	Outstanding Options	Weighted Average Exercise Price
Balances at December 31, 2018	—	—	\$ —
Reserved	155,459	—	—
Balances at December 31, 2019	155,459	—	—
Reserved	37,563	—	\$ —
Granted	(193,022)	193,022	0.99
Exercised(1)	—	(65,679)	0.99
Balances at December 31, 2020	—	127,343	\$ 0.99

(1) As of December 31, 2020, 38,976 shares underlying options exercised were subject to repurchase.

For the year ended December 31, 2020, the total intrinsic value of stock option awards exercised was immaterial, determined at the date of option exercise, and the total cash received upon exercise of stock options was \$0.06 million. The aggregate intrinsic value was calculated as the difference between the exercise prices of the underlying stock option awards and the estimated fair value of the common stock on the date of exercise.

Additional information related to the status of options at December 31, 2020, is as follows:

	Options	Weighted Average Exercise Price per Share	Weighted- Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding	127,343	\$ 0.99	9.27	\$ —
Exercisable	127,343	0.99	9.27	—
Vested and expected to vest	166,321	0.99	9.26	—
Vested and unexercised	32,099	0.99	9.08	—

As of December 31, 2020, there was unrecognized share-based compensation expense of \$0.1 million related to unvested share options which the Company expects to recognize over a weighted-average period of 2.9 years. The total fair value of shares vested during the year ended December 31, 2020 was \$0.04 million.

Stock-Based Compensation Expense

Total stock-based compensation for all options granted to employees, directors and non-employees, before taxes is as follows (in thousands):

	Year Ended December 31, 2020
Research and development expenses	\$ 31
General and administrative expenses	9
Total	\$ 40

Liability for Early Exercise of Stock Options

As of December 31, 2020, there were 38,976 unvested common shares outstanding that were issued upon the early exercise of stock options prior to the vesting of the underlying shares which are

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subject to repurchase by the Company at the original issuance price upon termination of the stockholders' services. The right to repurchase these shares generally lapses with respect to 25% of the shares underlying the option after one year of service to the Company and 1/48 of the shares underlying the original grant per month for 36 months thereafter. The shares purchased by the optionholders pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest. As of December 31, 2020, the Company recorded \$0.04 million as short- term and long-term liabilities associated with the cash received for shares issued subject to repurchase rights.

11. Income Taxes

The Company is liable for income taxes in the United States. For the years ended December 31, 2019 and 2020, the Company did not have any income for income tax purposes and therefore, no tax liability or expense has been recorded in these financial statements. The difference between the tax at the statutory federal tax rate and no tax provision recorded by the Company is primarily due to the Company's full valuation allowance against its deferred tax assets.

The provision for income taxes differs from the tax expense that would result by applying the statutory federal income tax rate to loss before taxes due to the following (in thousands):

	December 31,	
	2019	2020
Federal tax (benefit) at statutory rate	\$(1,183)	\$(2,856)
State tax (benefit) at statutory rate, net of federal tax benefit	(370)	(589)
Change in valuation allowance	1,454	2,066
Change in fair value of redeemable convertible preferred stock tranche liability	96	1,328
Other	3	51
Provision for income taxes	\$ —	\$ —

Recognition of deferred tax assets is appropriate when realization of such assets is more likely than not. Based upon the weight of available positive and negative evidence, which includes the Company's historical operating performance and the U.S. cumulative net losses in all prior periods, the Company has provided a valuation allowance against its U.S. deferred tax assets. The valuation allowance increased by \$2.1 million from December 31, 2019 to December 31, 2020 due to generation of current year net operating losses and research and development credits claimed.

Deferred income taxes reflect the net tax effects of loss and credit carryforwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Components of the Company's deferred tax assets are as follow (in thousands):

	December 31,	
	2019	2020
Deferred tax assets		
Net operating loss carryforwards	\$ 1,455	\$ 3,428
Tax credit carryforwards	9	91
Other	3	14
Gross deferred tax assets	1,467	3,533
Valuation allowance	(1,467)	(3,533)
Net deferred tax assets	\$ —	\$ —

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As of December 31, 2020, the Company had \$12.2 million of federal and \$12.4 million of state net operating loss available to offset future taxable income. The state net operating loss carryforwards begin to expire in 2037. The Company also has California research and development credits of \$0.1 million, which do not expire.

Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

A Section 382 ownership change generally occurs if one or more stockholders or groups of stockholders who own at least 5% of our stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. It is possible the Company experienced an ownership change during one of the rounds of funding received since the inception of the Company; however, no formal study has been performed. If it is determined there was an ownership change, the Company's net operating loss and credit carryforwards would be limited by Section 382. The Company is not in a taxable position and no net operating loss carryforwards or credit have been used to date.

The Company has adopted authoritative guidance which prescribes a recognition threshold and measurement attribute to the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in the Company's income tax return, and also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The Company files income tax returns in the U.S federal jurisdiction and California state jurisdiction. The Company is not currently under audit by the Internal Revenue Service or other similar state or local authorities. All tax years of the Company remain open to examination by major taxing jurisdictions to which the Company is subject.

12. Net Loss Per Share

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except for per share amounts):

	Year Ended December 31,	
	2019	2020
Numerator:		
Net loss	\$ (5,635)	\$ (13,603)
Add: accretion to redemption value and cumulative dividends on preferred stock	(99)	(981)
Net loss attributable to common stockholders	<u>\$ (5,734)</u>	<u>\$ (14,584)</u>
Denominator:		
Weighted-average common shares outstanding used to calculate net loss per share attributable to common stockholders, basic and diluted	<u>1,085,000</u>	<u>1,091,678</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (5.29)</u>	<u>\$ (13.36)</u>

Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods as the inclusion of all potential common shares

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outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	December 31,	
	2019	2020
Series A—First Tranche redeemable convertible preferred stock	1,838,331	1,868,714
Series A—Second Tranche redeemable convertible preferred stock	—	713,689
Options issued and outstanding	—	127,343
Early exercised common stock subject to future vesting	—	38,976
Total	1,838,331	2,748,722

13. Related Party Transactions

During the years ended December 31, 2019 and 2020, the Company recorded research and development expenses of \$4.7 million and \$0.7 million, respectively, related to the upfront milestone payment and issuance of redeemable convertible preferred stock in conjunction with the Anacor License. See Note 4 for further discussion.

14. Defined Contribution Plan

The Company began sponsoring a 401(k) Plan in 2019 that stipulates that eligible employees can elect to contribute to the 401(k) Plan, subject to certain limitations, on a pretax basis. During 2019 and 2020, the Company did not make a matching contribution.

15. Subsequent Events

The Company evaluated events occurring between the end of the most recent fiscal year and XX, 2021, the date the financial statements were available to be issued

Redeemable Convertible Preferred Stock Financing

The Company entered into a Series B redeemable convertible preferred stock purchase agreement with certain investors on March 5, 2021 whereby the Company issued 2,266,661 shares of Series B redeemable convertible preferred stock at a price per share of \$35.29 for cash. The net cash proceeds from this round of financing totaled \$79.7 million, net of issuance costs of \$0.3 million.

Adjuvant Global Health Agreement Addendum

In conjunction with Adjuvant's investment in the Company's Series B redeemable convertible preferred stock financing in March 2021, the Company entered into an Amended and Restated Global Health Agreement ("Adjuvant Amendment"). The Adjuvant Amendment expands Adjuvant's investment support to include the development of the Company's product candidate, epetraborole, for use in tuberculosis-endemic and tuberculosis-at-risk countries as defined in the agreement.

Anacor License Milestone

In June 2021, the Company incurred approximately \$0.3 million in research and development expense - related party upon achievement of a development milestone due to Anacor.

Shares

AN2Therapeutics

Common Stock

PROSPECTUS

Cowen

**SVB Leerink
Oppenheimer & Co.**

Evercore ISI

Through and including _____, 2021 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS**

Unless otherwise indicated, all references to “AN2,” the “company,” “we,” “our,” “us,” or similar terms refer to AN2 Therapeutics, Inc.

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by us, other than underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the Securities and Exchange Commission, or the SEC, registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee, and The Nasdaq Global Market, or Nasdaq, listing fee.

	Amount Paid or to Be Paid
SEC registration fee	\$ *
FINRA filing fee	*
Nasdaq listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Custodian transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	<u>\$ *</u>

* To be provided by amendment.

Item 14. Indemnification of Directors and Executive Officers.

Section 145 of the DGCL authorizes a court to award, or a corporation’s board of directors to grant, indemnity to directors and executive officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act. Our amended and restated certificate of incorporation that will be in effect immediately after the closing of this offering permits indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the DGCL, and our amended and restated bylaws that will be in effect on the closing of this offering provide that we will indemnify our directors and executive officers and permit us to indemnify our employees and other agents, in each case to the maximum extent permitted by the DGCL.

We have entered into indemnification agreements with our directors and executive officers, whereby we have agreed to indemnify our directors and executive officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or executive officer was, or is threatened to be made, a party by reason of the fact that such director or executive officer is or was a director, executive officer, employee, or agent of AN2, provided that such director or executive officer acted in good faith and in a manner that the director or executive officer reasonably believed to be in, or not opposed to, the best interest of AN2.

At present, there is no pending litigation or proceeding involving a director or executive officer of AN2 regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

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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 in February 2017.

(a) Equity Plan-Related Issuances

1. From February 22, 2017 through September 10, 2021, we granted certain of our directors, executive officers, employees, and consultants options to purchase 631,250 shares of our common stock under our 2017 Equity Incentive Plan with per share exercise prices ranging between \$0.00001 and \$15.52 per share.
2. From February 22, 2017 through September 10, 2021, we issued and sold an aggregate of 175,382 shares of common stock upon the exercise of options under our 2017 Equity Incentive Plan at per share exercise prices ranging from \$0.00001 to \$0.99, for an aggregate exercise price of \$74,629.18.

(b) Other Issuances of Capital Stock

3. In multiple closings held between February 2017 and May 2018, we granted certain of our directors, executive officers, and consultants 1,773,000 shares of restricted common stock with a per share price of \$0.00001, for an aggregate purchase price of \$17.73.
4. In November 2019, we issued and sold 1,402,338 shares of Series A redeemable convertible preferred stock at a price per share of \$5.99, for an aggregate purchase price of approximately \$8.4 million.
5. In November 2019, we issued 466,376 shares of Series A redeemable convertible preferred stock to Anacor Pharmaceuticals, Inc., or Anacor, as consideration in connection with entering into a license agreement with Anacor.
6. In October 2020, we issued and sold 601,001 shares of Series A redeemable convertible preferred stock at a price per share of \$5.99, for an aggregate purchase price of approximately \$3.6 million.
7. In October 2020, we issued 112,688 shares of Series A redeemable convertible preferred stock to Anacor as consideration in connection with a license agreement with Anacor.
8. In March 2021, we issued and sold 2,266,661 shares of Series B redeemable convertible preferred stock at a price per share of \$35.29404, for an aggregate purchase price of approximately \$80.0 million.

The offers, sales, and issuances of the securities described in paragraphs (1) and (2) were deemed to be exempt from registration under Rule 701 promulgated under the Securities Act as transactions under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering. The recipients of such securities were our directors, employees, or bona fide consultants and received the securities under our equity incentive plans. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business, or other relationships, to information about us.

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The offers, sales, and issuances of the securities described in paragraphs (3) through (8) were deemed to be exempt under Section 4(a)(2) of the Securities Act or Rule 506 of Regulation D under the Securities Act as a transaction by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business, or other relationships, to information about us. No underwriters were involved in these transactions.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit Number	Description
1.1+	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation, as currently in effect.
3.2+	Form of Amended and Restated Certificate of Incorporation, to be in effect immediately after the closing of the offering.
3.3	Amended and Restated Bylaws, as currently in effect.
3.4+	Form of Amended and Restated Bylaws, to be in effect immediately after the closing of the offering.
4.1+	Form of Common Stock Certificate.
4.2	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated March 5, 2020.
5.1+	Opinion of Cooley LLP.
10.1#	AN2 Therapeutics, Inc. 2017 Equity Incentive Plan, as amended.
10.2#	Forms of Stock Option Grant Notice, Stock Option Agreement and Notice of Exercise and Early Exercise Stock Purchase Agreement under the AN2 Therapeutics, Inc. 2017 Equity Incentive Plan.
10.3+#	AN2 Therapeutics, Inc. 2021 Equity Incentive Plan.
10.4+#	Forms of Stock Option Grant Notice, Stock Option Agreement and Notice of Exercise under the AN2 Therapeutics, Inc. 2021 Equity Incentive Plan.
10.5+#	Forms of Restricted Stock Unit Grant Notice and Award Agreement under the AN2 Therapeutics, Inc. 2021 Equity Incentive Plan.
10.6+#	AN2 Therapeutics, Inc. 2021 Employee Stock Purchase Plan.
10.7+#	AN2 Therapeutics, Inc. 2021 Non-Employee Director Compensation Policy.
10.8+#	AN2 Therapeutics, Inc. Officer Severance Plan.
10.9+#	Form of Indemnification Agreement by and between the Registrant and its directors and executive officers.
10.10+#	Offer Letter by and between the Registrant and Eric Easom, dated November 19, 2019.
10.11+#	Offer Letter by and between the Registrant and Lucy Day, dated November 19, 2019.

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10.12+#	Offer Letter by and between the Registrant and Sanjay Chanda, dated November 19, 2019.
10.13+*	License Agreement by and between the Registrant and Anacor Pharmaceuticals, Inc., dated November 20, 2019.
10.14+*	License Agreement by and between the Registrant and Bii Biosciences Limited, dated November 20, 2019.
23.1+	Consent of independent registered public accounting firm.
23.2+	Consent of Cooley LLP (included in Exhibit 5.1).
24.1+	Power of Attorney (included on signature page).

+ To be filed by amendment.

Indicates management contract or compensatory plan.

* Portions of this exhibit (indicated by [*]) have been omitted because the registrant has determined that the information is both not material and is the type that the registrant treats as private or confidential.

(b) Financial Statement Schedules.

All financial statement schedules are omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or the notes thereto.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant under the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the U.S. Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus filed by the registrant under Rule 424(b)(1) or (4) or 497(h) under the Securities Act will be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus will be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time will be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Menlo Park, State of California on _____, 2021.

AN2 THERAPEUTICS, INC.

By: _____
Name: Eric Easom
Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eric Easom, Lucy Day, and Michael Nazak and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Eric Easom	Chief Executive Officer and Director (Principal Executive Officer)	, 2021
_____ Lucy O. Day	Chief Financial Officer (Principal Financial Officer)	, 2021
_____ Michael Nazak	Vice President and Controller (Principal Accounting Officer)	, 2021
_____ Joseph Zakrzewski	Chair and Director	, 2021
_____ Kabeer Aziz	Director	, 2021

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<hr/> Gilbert L. Marks	Director	, 2021
<hr/> Patricia (Patty) Martin	Director	, 2021
<hr/> Rob Readnour	Director	, 2021
<hr/> Stephanie Wong	Director	, 2021

**THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
AN2 THERAPEUTICS, INC.**

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

AN2 Therapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is AN2 Therapeutics, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on February 24, 2017 under the name AN2 Therapeutics, Inc.

2. That the board of directors of this corporation (the "Board of Directors") duly adopted resolutions proposing to amend and restate the 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 Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is AN2 Therapeutics, Inc. (the "Corporation").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 850 New Burton Road, Suite 201, in the City of Dover, County of Kent 19904. The name of its registered agent at such address is Cogency Global Inc.

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) 7,295,839 shares of Common Stock, \$0.00001 par value per share ("Common Stock") and (ii) 4,849,064 shares of Preferred Stock, \$0.00001 par value per share ("Preferred Stock").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Third Amended and Restated Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Third Amended and Restated Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Third 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.

B. PREFERRED STOCK

2,582,403 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series A Preferred Stock" and 2,266,661 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "Series B Preferred Stock" with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" or "subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth. References to "Preferred Stock" mean, collectively, the Series A Preferred Stock and Series B Preferred Stock.

1. Dividends. From and after the date of the issuance of any shares of Preferred Stock, dividends at the rate per annum of \$0.4792 per share with respect to the Series A Preferred Stock and \$2.82352 per shares with respect to the Series B Preferred Stock shall accrue on such shares of Preferred Stock, as applicable (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock) (the "Accruing Dividends"). Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1 or in Subsection 2.1 and Section 6, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing 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 Third 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 the greater of (i) the amount of the aggregate Accruing Dividends then accrued on such share of Preferred Stock and not previously paid and (ii) (A) 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 (1) 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 (2) 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 (B) 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 (1) 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 (2) multiplying such fraction by an amount equal to the applicable 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, as to the Series A Preferred Stock, \$5.99 per share, and as to the Series B Preferred Stock, \$35.29404 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 the stockholders in a 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) the applicable Original Issue Price, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other 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 "Preferred 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 Subsection 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

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 Preferred 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 Subsection 2.1 or the remaining Available Proceeds, as the case may be, shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “Deemed Liquidation Event” unless the holders of at least 67% of the outstanding shares of Preferred Stock, voting together as a single class (the “Requisite Holders”) elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event:

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party or
 - (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (i) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or (ii) 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 Subsection 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 among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 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 (iii) 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 Preferred 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. The provisions of Section 6 shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Preferred Stock pursuant to this Subsection 2.3.2(b). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

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 Series A Director (as defined herein).

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the “Additional Consideration”), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the “Initial Consideration”) shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Subsection 2.3.4, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations 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 Third 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 Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Corporation (the “Series A Directors”) and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect two 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 Series A Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series A Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of 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. Notwithstanding the provisions of Section 223(a)(1) and 223(a)(2) of the Delaware General Corporation Law, any newly created directorships resulting from any increase in the authorized number of directors or amendment of this Third Amended and Restated Certificate of Incorporation may be filled by a majority of the

directors then in office, though less than a quorum, or by a sole director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced; provided, however, that where such newly created directorship is in relation to the directors elected by the holders of a class or series of stock, the holders of shares of such class or series may override the Board of Directors' action to fill such newly created directorship as provided for herein. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3.3 Preferred Stock Protective Provisions. At any time when at least 485,000 shares of Preferred Stock (subjected 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 or otherwise, do any of the following without (in addition to any other vote required by law or this Third 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;

3.3.2 amend, alter or repeal any provision of this Third Amended and Restated Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Preferred Stock;

3.3.3 increase or decrease the authorized number of shares of Preferred Stock or Common Stock;

3.3.4 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to all series of Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of any series of Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock unless the same ranks junior to all series of Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

3.3.5 (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with any series of Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to any series of Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to any series of Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with any series of Preferred Stock in respect of any such right, preference or privilege;

3.3.6 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 and (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 the lower of the original purchase price or the then-current fair market value thereof;

3.3.7 create, or authorize the creation of, or issue, or authorize the issuance of any debt security or create any lien or security interest (except for purchase money liens or statutory liens of landlords, mechanics, materialmen, workmen, warehousemen and other similar persons arising or incurred in the ordinary course of business), or incur other indebtedness for borrowed money, or permit any subsidiary to take any such action with respect to any debt security lien, security interest or incur other indebtedness for borrowed money, if the aggregate indebtedness of the Corporation and its subsidiaries for borrowed money following such action would exceed \$100,000 other than equipment leases or bank lines of credit unless such debt security has received the prior approval of the Board of Directors, including the approval of at least one of the Series A Directors;

3.3.8 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;

3.3.9 approve any spin off or similar sale outside the ordinary course of business of any of the Corporation's assets or business operations;

3.3.10 hire, fire, or change the compensation of the executive officers, including approving any option grants, except as approved by the Board of Directors, including the approval of a majority of the Series A Directors;

3.3.11 increase or decrease the authorized number of directors constituting the Board of Directors; or

3.3.12 agree to do or pursue any of the foregoing.

4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the “Conversion Rights”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Original Issue Price by the Conversion Price (as defined below) in effect at the time of conversion; provided that such holder may waive such option to convert upon written notice to the Corporation. The “Conversion Price” of a series of Preferred Stock shall initially be equal to the Original Issue Price for such series. Such initial Conversion Price, and the rate at which shares of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a notice of redemption of any shares of Preferred Stock pursuant to Section 6, the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Conversion Rights for any shares not yet redeemed shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock; provided that the foregoing termination of Conversion Rights shall not affect the amount(s) otherwise paid or payable in accordance with Subsection 2.1 to holders of Preferred Stock pursuant to such liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation’s transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder’s shares

of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "Conversion Time"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Third 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 Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon

such conversion as provided in Subsection 4.2 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 Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

Convertible Securities.

(a) "Option" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or

(b) "Original Issue Date" shall mean the date on which the first share of each series of Preferred Stock was issued.

(c) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "Exempted Securities"):

- (i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on 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 Subsection 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 at least one of the Series A Directors;
- (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 at least one of the Series A 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 at least one of the Series A 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 at least one of the Series A 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 at least one of the Series A Directors.

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 Subsection 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 Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date), are revised after the Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, the Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Conversion Price in effect immediately prior to such issuance or deemed issuance, then the Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP₂" shall mean the Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) "CP₁" 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 CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors 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 Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

- (i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, and such issuance dates occur within a period of no more than ninety (90) days from the first such issuance to the final such issuance, then, upon the final such issuance, the Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of

Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors 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 Common Stock to the public at a price of at least \$52.94 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$50 million of gross proceeds, net of the underwriting discount and commissions, to the Corporation and in connection with such offering the Common Stock is listed for trading on the Nasdaq Stock Market's National Market, the New York Stock Exchange or another exchange or marketplace approved by the Board of Directors 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 Common Stock, at the then effective conversion rate as calculated pursuant to Subsection 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 Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. Redemption.

6.1 General. Unless prohibited by Delaware law governing distributions to stockholders, shares of Preferred Stock shall be redeemed by the Corporation at a price equal to the Original Issue Price per share, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon (the "Redemption Price"), in three (3) annual installments commencing not more than sixty (60) days after receipt by the Corporation at any time on or after seven (7) years from the date of this Certificate of Incorporation, from the Requisite Holders, of written notice requesting redemption of all shares of Preferred Stock (the "Redemption Request"). Upon receipt of a Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. The date of each such installment shall be referred to as a "Redemption Date". On each Redemption Date, the Corporation shall redeem, on a pro rata basis in accordance with the number of shares of Preferred Stock owned by each holder, that number of outstanding shares of Preferred Stock determined by dividing (i) the total number of shares of Preferred Stock outstanding immediately prior to such Redemption Date by (ii) the number of remaining

Redemption Dates (including the Redemption Date to which such calculation applies); provided, however, that Excluded Shares (as such term is defined in Subsection 6.2) shall not be redeemed and shall be excluded from the calculations set forth in this sentence. If on any Redemption Date Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Preferred Stock to be redeemed, the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law.

6.2 Redemption Notice. The Corporation shall send written notice of the mandatory redemption (the "Redemption Notice") to each holder of record of Preferred Stock not less than forty (40) days prior to each Redemption Date. Each Redemption Notice shall state:

(a) the number of shares of Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice;

(b) the Redemption Date and the Redemption Price;

(c) the date upon which the holder's right to convert such shares terminates (as determined in accordance with Subsection 4.1); and

(d) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the twentieth (20th) day after the date of delivery of the Redemption Notice to a holder of Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this Section 6, then the shares of Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation's receipt of such notice shall thereafter be "Excluded Shares." Excluded Shares shall not be redeemed or redeemable pursuant to this Section 6, whether on such Redemption Date or thereafter.

6.3 Surrender of Certificates; Payment. On or before the applicable Redemption Date, each holder of shares of Preferred Stock to be redeemed on such Redemption Date, unless such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall, if a holder of shares in certificated form, surrender the certificate or certificates representing such shares (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) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Redemption Price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Preferred Stock represented by a certificate are redeemed, a new certificate, instrument, or book entry representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder.

6.4 Interest. If any shares of Preferred Stock are not redeemed for any reason on any Redemption Date, all such unredeemed shares shall remain outstanding and entitled to all the rights and preferences provided herein, and the Corporation shall pay interest on the Redemption Price applicable to such unredeemed shares at an aggregate per annum rate equal to twelve percent (12% (increased by one percent (1%) each month following the Redemption Date until the Redemption Price, and any interest thereon, is paid in full), with such interest to accrue daily in arrears and be compounded annually; provided, however, that in no event shall such interest exceed the maximum permitted rate of interest under applicable law (the “**Maximum Permitted Rate**”), provided, however, that the Corporation shall take all such actions as may be necessary, including without limitation, making any applicable governmental filings, to cause the Maximum Permitted Rate to be the highest possible rate. In the event any provision hereof would result in the rate of interest payable hereunder being in excess of the Maximum Permitted Rate, the amount of interest required to be paid hereunder shall automatically be reduced to eliminate such excess; provided, however, that any subsequent increase in the Maximum Permitted Rate shall be retroactively effective to the applicable Redemption Date to the extent permitted by law.

6.5 Rights Subsequent to Redemption. If the Redemption Notice shall have been duly given, and if on the applicable Redemption Date the Redemption Price payable upon redemption of the shares of Preferred Stock to be redeemed on such Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that any certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Preferred Stock shall cease to accrue after such Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Redemption Price without interest upon surrender of any such certificate or certificates therefor.

7. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

8. Waiver. Except as otherwise set forth herein, (a) any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of the Requisite Holders, and (b) at any time more than one (1) series of Preferred Stock is issued and outstanding, any of the rights, powers, preferences and other terms of any series of Preferred Stock set forth herein may be waived on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of at least 67% of the shares of such series of Preferred Stock then outstanding.

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 Third Amended and Restated Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by this Third 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.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: The following indemnification provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnified Person") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Tenth the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Tenth or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Tenth is not paid in full within thirty (30) days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Tenth shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of this Third Amended and Restated Certificate of Incorporation, the Bylaws of the Corporation, or any agreement, or pursuant to any vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. **Insurance.** The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Tenth; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Tenth.

9. **Amendment or Repeal.** Any repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

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, "**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 Third 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 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: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Third 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 (in addition to any other consent required under this Third 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 in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any “preferential dividends arrears amount” or “preferential rights amount” (as those terms are defined therein) shall be deemed to be zero (0).

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Third Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation’s Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Third Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 4th day of March, 2021.

By: /s/ Eric Easom

Eric Easom
Chief Executive Officer

AMENDED AND RESTATED BYLAWS

OF

AN2 THERAPEUTICS, INC.

(A DELAWARE CORPORATION)

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware is 850 New Burton Road, Suite 201, City of Dover, County of Kent, 19904 or in such other location as the Board of Directors of the corporation (the “*Board of Directors*”) may from time to time determine or the business of the corporation may require.

Section 2. Other Offices. The corporation will also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS’ MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting will not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law (the “*DGCL*”).

Section 5. Annual Meeting.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may lawfully come before it, will be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation’s notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving of notice provided for in the following paragraph, who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section.

(b) At an annual meeting of the stockholders, only such business will be conducted as has been properly brought before the meeting. For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of paragraph (a) of this Section, (i) the stockholder must have given timely notice thereof in writing to the Secretary of the corporation, (ii) such other business must be a proper matter for stockholder action under the DGCL and applicable law, (iii) if the stockholder, or the beneficial owner on whose behalf any such proposal or nomination is made, has provided the corporation with a Solicitation Notice (as defined in this paragraph), such stockholder or beneficial owner must, in the case of a proposal, have delivered a proxy statement and form of proxy to

holders of at least the percentage of the corporation's voting shares required under applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the corporation's voting shares reasonably believed by such stockholder or beneficial owner to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder, and must, in either case, have included in such materials the Solicitation Notice, and (iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this Section, the stockholder or beneficial owner proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section. To be timely, a stockholder's notice will be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting; *provided, however*, that in the event that the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 30 days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. In no event will the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above. Such stockholder's notice will set forth: (A) as to each person whom the stockholder proposed to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "**1934 Act**"), and Rule 14a-4(d) thereunder (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the corporation's books, and of such beneficial owner, (ii) the class and number of shares of the corporation that are owned beneficially and of record by such stockholder and such beneficial owner, and (iii) whether either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of, in the case of the proposal, at least the percentage of the corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (an affirmative statement of such intent, a "**Solicitation Notice**").

(c) Notwithstanding anything in the second sentence of paragraph (b) of this Section to the contrary, in the event that the number of directors to be elected to the Board of Directors of the corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the corporation at least 100 days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section will also be considered timely, but only with respect to nominees for any new positions created by such increase, if it is delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the 10th day following the day on which such public announcement is first made by the corporation.

(d) Only such persons who are nominated in accordance with the procedures set forth in this Section (or elected or appointed pursuant to Article IV of these Amended and Restated Bylaws (the "**Bylaws**")) will be eligible to serve as directors and only such business will be conducted at a meeting of stockholders as has been brought before the meeting in accordance with the procedures set

forth in this Section. Except as otherwise provided by law, the Chairman of the meeting will have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defective proposal or nomination will not be presented for stockholder action at the meeting and will be disregarded.

(e) Notwithstanding the foregoing provisions of this Section, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, stockholders must provide notice as required by the regulations promulgated under the 1934 Act. Nothing in these Bylaws is deemed to affect any rights of stockholders to request inclusion of proposals in the corporation proxy statement pursuant to Rule 14a-8 under the 1934 Act.

(f) For purposes of this Section, "public announcement" means disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission (the "SEC") pursuant to Section 13, 14 or 15(d) of the 1934 Act.

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer,

(iii) the Board of Directors pursuant to a resolution adopted by directors representing a quorum of the directors then serving on the Board of Directors or (iv) by the holders of shares entitled to cast not less than 20% of the votes at the meeting, and will be held at such place, on such date, and at such time as the Board of Directors will fix.

(b) If a special meeting is properly called by any person or persons other than the Board of Directors, the request will be in writing, specifying the general nature of the business proposed to be transacted, and will be delivered personally or sent by certified or registered mail, return receipt requested, or by telegraphic or other facsimile transmission to the Chairman of the Board of Directors, the Chief Executive Officer, or the Secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors will determine the time and place of such special meeting, which will be held not less than 35 nor more than 120 days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the officer receiving the request will cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. Nothing contained in this paragraph (b) is to be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

Section 7. Notice of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders will be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his or her attendance thereat in person, by remote communication, if

applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting will be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote will constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business will be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of a majority of shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the subject matter will be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors will be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, will constitute a quorum entitled to take action with respect to that vote on that matter. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting will be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business that might have been transacted at the original meeting pursuant to the Certificate of Incorporation, these Bylaws or applicable law. If the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, will be entitled to vote at any meeting of stockholders. Every person entitled to vote or execute consents will have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy will be voted after three years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship where it is so provided, their acts with respect to voting (including giving consent pursuant to Section 13) will have the following effect: (a) if only one votes, his or her act binds all; (b) if more than one votes and the vote is not evenly split, the act of the majority so voting binds all; (c) if more than one votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) will be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary will prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list will be open to the examination of any stockholder, for any purpose germane to the meeting, on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list will be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting.

(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of the stockholders, or any action that may be taken at any annual or special meeting of the stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, or by electronic transmission setting forth the action so taken, will be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) Every written consent or electronic transmission will bear the date of signature of each stockholder who signs the consent, and no written consent or electronic transmission will be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated consent delivered to the corporation in the manner herein required, written consents or electronic transmissions signed by a sufficient number of stockholders to take action are delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office will be by hand or by certified or registered mail, return receipt requested.

(c) Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent will be given to those stockholders who have not consented in writing or by electronic transmission and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders to take action were delivered to the corporation as provided in Section 228(c) of the DGCL. If the action to which the stockholders consented is such as would have required the filing of a certificate under any section of the DGCL if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section must state, in lieu of any statement required by such section concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

(d) An electronic mail, facsimile or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, will be deemed to be written, signed and dated for the purposes of this Section, provided that any such electronic mail, facsimile or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the electronic mail, facsimile or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder and (ii) the date on which such stockholder or proxyholder or authorized person or persons transmitted such electronic mail, facsimile or electronic transmission. The date on which such electronic mail, facsimile or electronic transmission is transmitted will be deemed to be the date on which such consent was signed. No consent given by electronic mail, facsimile or other electronic transmission will be deemed to have been delivered until such consent is reproduced in paper form and until such paper form is delivered to the corporation by delivery to its registered office in the state of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office will be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by electronic mail, facsimile or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction is a complete reproduction of the entire original writing.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer, or, if the Chief Executive Officer is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, will act as chairman. The Secretary, or, in his or her absence, an Assistant Secretary directed to do so by the Chief Executive Officer, will act as secretary of the meeting.

(b) The Board of Directors is entitled to make such rules or regulations for the conduct of meetings of stockholders as it deems necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting has the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman permits, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters that are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting will be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders will not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office. The authorized number of directors of the corporation will be fixed by the Board of Directors from time to time. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors have not been elected at an annual meeting, they may be elected as soon thereafter as convenient.

Section 16. Powers. The business and affairs of the corporation will be managed by or under the direction of the Board of Directors, except as otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Term of Directors.

(a) Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, directors will be elected at each annual meeting of stockholders to serve until his or her successor is duly elected and qualified or until his or her death, resignation or removal. No decrease in the number of directors constituting the Board of Directors will shorten the term of any incumbent director.

Section 18. Vacancies.

(a) Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock, 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 will, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships will be filled by stockholders, 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, or by a sole remaining director; *provided, however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series will, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships must be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected. Any director elected in accordance with the preceding sentence will 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 has been elected and qualified. A vacancy in the Board of Directors will be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no such specification is made, it will be deemed effective at the pleasure of the Board of Directors. When one or more directors resigns from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, will have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations become effective, and each director so chosen will hold office for the unexpired portion of the term of the director whose place is vacated and until his or her successor has been duly elected and qualified.

Section 20. Removal.

(a) Subject to any limitations imposed by applicable law, the Board of Directors or any director may be removed from office at any time (i) with cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors or (ii) without cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation, entitled to elect such director.

Section 21. Meetings

(a) **Regular Meetings.** Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware that has been designated by the Board of Directors and publicized among all directors, either orally or in writing, including a voice-messaging system or other system designated to record and communicate messages, facsimile, or by electronic mail or other electronic means. No further notice will be required for a regular meeting of the Board of Directors.

(b) **Special Meetings.** Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board of Directors, the Chief Executive Officer (if a director), the President (if a director) or any director.

(c) **Meetings by Electronic Communications Equipment.** Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means constitutes presence in person at such meeting.

(d) **Notice of Special Meetings.** Notice of the time and place of all special meetings of the Board of Directors will be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least 24 hours before the date and time of the meeting. If notice is sent by US mail, it will be sent by first class mail, postage prepaid at least three days before the date of the meeting. Notice of any meeting may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) **Waiver of Notice.** The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, will be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice signs a written waiver of notice or waives notice by electronic transmission. All such waivers will be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, a quorum of the Board of Directors will consist of a majority of the total number of directors then serving; *provided, however*, that such number will never be less than 1/3 of the total number of directors authorized except that when one director is authorized, then one director will constitute a quorum. At any meeting, whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting. If the Certificate of Incorporation provides that one or more directors will have more or less than one vote per director on any matter, every reference in this Section to a majority or other proportion of the directors will refer to a majority or other proportion of the votes of the directors.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business will be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing will be in paper form if the minutes are maintained in paper form and will be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees and Compensation. Directors will be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained is to be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) **Executive Committee.** The Board of Directors may appoint an Executive Committee to consist of one or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors, will have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee will have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any bylaw of the corporation.

(b) **Other Committees.** The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors will consist of one or more members of the Board of Directors and will have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event will any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) **Term.** The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of paragraphs (a) or (b) of this Section may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member will terminate on the date of his or her death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any

committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section will be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place that has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee will constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present will be the act of such committee.

Section 26. Duties of Chairman of the Board of Directors. The Chairman of the Board of Directors, when present, will preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors designates from time to time. If there is no Chief Executive Officer and no President, then the Chairman of the Board of Directors will also serve as the Chief Executive Officer of the corporation and will have the powers and duties prescribed in Section 29(b).

Section 27. Organization. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer (if a director), or if the Chief Executive Officer is not a director or is absent, the President (if a director), or if the President is not a director or is absent, the most senior Vice President (if a director) or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, will preside over the meeting. The Secretary, or in his or her absence, any Assistant Secretary directed to do so by the Chief Executive Officer or President, will act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 28. Officers Designated. The officers of the corporation will include, if and when designated by the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer, the Treasurer and the Controller, all of whom will be elected or appointed from time to time by the Board of Directors. The Board of Directors may also appoint one or more Assistant Secretaries, Assistant Treasurers, Assistant Controllers and such other officers and agents with such powers and duties as it deems necessary. The Board of Directors may assign such additional titles to one or more of the officers as it deems appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation will be fixed by or in the manner designated by the Board of Directors.

Section 29. Tenure and Duties of Officers.

(a) General. All officers will hold office at the pleasure of the Board of Directors and until their successors have been duly elected or appointed and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors, or by the Chief Executive Officer or other officer if so authorized by the Board of Directors.

(b) Duties of Chief Executive Officer. The Chief Executive Officer will preside at all meetings of the stockholders and (if a director) at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. The Chief Executive Officer will be the chief executive officer of the corporation and will, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The Chief Executive Officer will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors designates from time to time.

(c) Duties of President. In the absence or disability of the Chief Executive Officer or if the office of Chief Executive Officer is vacant, the President will preside at all meetings of the stockholders and (if a director) at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. If the office of Chief Executive Officer is vacant, the President will be the chief executive officer of the corporation (including for purposes of any reference to Chief Executive Officer in these Bylaws) and will, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors designates from time to time.

(d) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents will perform other duties commonly incident to their office and will also perform such other duties and have such other powers as the Board of Directors or the President designates from time to time.

(e) Duties of Secretary. The Secretary will attend all meetings of the stockholders and of the Board of Directors and will record all acts and proceedings thereof in the minute book of the corporation. The Secretary will give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary will perform all other duties provided for in these Bylaws and other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors will designate from time to time. The Chief Executive Officer may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer designates from time to time.

(f) Duties of Chief Financial Officer. The Chief Financial Officer will keep or cause to be kept the books of account of the corporation in a thorough and proper manner and will render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer. The Chief Financial Officer, subject to the order of the Board of Directors, will have the custody of all funds and securities of the corporation. The Chief Financial Officer will perform other duties commonly incident to his or her office and will also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer designate from time to time. The Chief Executive Officer may direct the Treasurer or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer designates from time to time.

Section 30. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 31. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission notice to the Board of Directors or to the Chief Executive Officer or to the President or to the Secretary. Any such resignation will be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation will become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation will not be necessary to make it effective. Any resignation will be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 32. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written or electronic consent of the directors in office at the time, or by any committee or superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 33. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name, or to enter into contracts on behalf of the corporation, except as otherwise provided by law or these Bylaws, and such execution or signature will be binding upon the corporation. All checks and drafts drawn on banks or other depositories of funds to the credit of the corporation or on special accounts of the corporation will be signed by such person or persons as the Board of Directors authorizes so to do. Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee will have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 34. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, will be voted, and all proxies with respect thereto will be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 35. Form and Execution of Certificates. The shares of the corporation will be represented by certificates, or will be uncertificated. Certificates for the shares of stock, if any, of the corporation will be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of shares of stock in the corporation represented by certificate will be entitled to have a certificate signed by or in the name of the corporation by any two authorized officers of the corporation, including but not limited to the Chief Executive Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him or her in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he or she were such officer, transfer agent, or registrar at the date of issue.

Section 36. Lost Certificates. A new certificate or certificates will be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it requires or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 37. Restrictions on Transfer.

(a) No holder of any of the shares of stock of the corporation may sell, transfer, assign, pledge, or otherwise dispose of or encumber any of the shares of stock of the corporation or any right or interest therein, whether voluntarily or by operation of law, or by gift or otherwise (each, a "**Transfer**") without the prior written consent of the corporation, upon duly authorized action of its Board of Directors. The corporation may withhold consent for any legitimate corporate purpose, as determined by the Board of Directors. Examples of the basis for the corporation to withhold its consent include, without limitation, (i) if such Transfer to individuals, companies or any other form of entity identified by the corporation as a potential competitor or considered by the corporation to be unfriendly; or (ii) if such Transfer increases the risk of the corporation having a class of security held of record by 2,000 or more persons, or 500 or more persons who are not accredited investors (as such term is defined by the SEC), as described in Section 12(g) of the 1934 Act and any related regulations, or otherwise requiring the corporation to register any class of securities under the 1934 Act; or (iii) if such Transfer would result in the loss of any federal or state securities law exemption relied upon by the corporation in connection with the initial issuance of such shares or the issuance of any other securities; or (iv) if such Transfer is facilitated in any manner by any public posting, message board, trading portal, internet site, or similar method of communication, including without limitation any trading portal or internet site intended to facilitate secondary transfers of securities; or (v) if such Transfer is to be effected in a brokered transaction; or (vi) if such Transfer represents a Transfer of less than all of the shares then held by the stockholder and its affiliates or is to be made to more than a single transferee.

(b) If a stockholder desires to Transfer any shares, then the stockholder will first give written notice to the corporation. The notice must name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer. Any shares proposed to be transferred to which Transfer the corporation has consented pursuant to paragraph (a) of this Section will first be subject to the corporation's right of first refusal located in Section 38 of these Bylaws.

(c) At the option of the corporation, the stockholder will be obligated to pay to the corporation a reasonable transfer fee related to the costs and time of the corporation and its legal and other advisors related to any proposed Transfer.

(d) Any Transfer, or purported Transfer, of shares not made in strict compliance with this Section will be null and void, will not be recorded on the books of the corporation and will not be recognized by the corporation. Transfers of record of shares of stock of the corporation will be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(e) The restriction on Transfer set forth in Section 37(a) will not apply to the Transfer of shares of Preferred Stock or to the Transfer of any shares of Common Stock issued upon the conversion of any shares of Preferred Stock.

(f) The restriction on Transfer set forth in Section 37(a) will terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the Securities Act of 1933, as amended (the "**1933 Act**").

(g) The certificates representing shares of Common Stock of the corporation will bear on their face the following legend so long as the foregoing Transfer restrictions are in effect:

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED
IN THE BYLAWS OF THE CORPORATION."

Section 38. Right of First Refusal. No stockholder will Transfer any of the shares of stock of the corporation, except by a Transfer that meets the requirements set forth in this Section 38, in addition to any other restrictions or requirements set forth under applicable law or these Bylaws:

(a) If the stockholder desires to Transfer any of his or her shares of stock, then the stockholder must first give written notice thereof to the corporation. The notice must name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer.

(b) For 30 days following receipt of such notice, the corporation has the option to purchase up to all the shares specified in the notice at the price and upon the terms set forth in such notice; *provided, however*, that, with the consent of the stockholder, the corporation has the option to purchase a lesser portion of the shares specified in said notice at the price and upon the terms set forth therein. In the event of a gift, property settlement or other Transfer in which the proposed transferee is not paying the full price for the shares, and that is not otherwise exempted from the provisions of this Section, the price will be deemed to be the fair market value of the stock at such time as determined in good faith by the Board of Directors. In the event the corporation elects to purchase all of the shares or, with consent of the stockholder, a lesser portion of the shares, it will give written notice to the transferring stockholder of its election and settlement for said shares will be made as provided below in paragraph (d) of this Section.

(c) The corporation may assign its rights hereunder.

(d) In the event the corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in said transferring stockholder's notice, the Secretary of the corporation will so notify the transferring stockholder and settlement thereof will be made in cash within 30 days after the Secretary of the corporation receives said transferring stockholder's notice; provided that if the terms of payment set forth in said transferring stockholder's notice were other than cash against delivery, the corporation and/or its assignee(s) will pay for said shares on the same terms and conditions set forth in said transferring stockholder's notice.

(e) In the event the corporation and/or its assignees(s) do not elect to acquire all of the shares specified in the transferring stockholder's notice, said transferring stockholder may, subject to the corporation's approval and all other restrictions on Transfer located in Section 37 of these Bylaws, within the 60-day period following the expiration or waiver of the option rights granted to the corporation and/or its assignees(s) herein, Transfer the shares specified in said transferring stockholder's notice that were not acquired by the corporation and/or its assignees(s) as specified in said transferring stockholder's notice. All shares so sold by said transferring stockholder will continue to be subject to the provisions of this Bylaw in the same manner as before said Transfer.

(f) Anything to the contrary contained herein notwithstanding, the following transactions are exempt from the right of first refusal in paragraph (a) of this Section:

(1) A stockholder's Transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership or limited liability company of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership or the controlling member(s) of such limited liability company. "Immediate family" as used herein means spouse, lineal descendant, father, mother, brother, or sister of the stockholder making such Transfer;

(2) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent Transfer of said shares by said institution will be conducted in the manner set forth in this Bylaw;

(3) A stockholder's Transfer of any or all of such stockholder's shares to the corporation or to any other stockholder of the corporation;

(4) A stockholder's Transfer of any or all of such stockholder's shares to a person who, at the time of such Transfer, is an officer or director of the corporation;

(5) A corporate stockholder's Transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder;

(6) A stockholder's Transfer of shares of Preferred Stock of the corporation (or any shares of Common Stock issued upon conversion thereof);

(7) A corporate stockholder's Transfer of any or all of its shares to any or all of its stockholders; or

(8) A Transfer by a stockholder that is a limited or general partnership to any or all of its partners or former partners in accordance with partnership interests.

In any such case, the transferee, assignee, or other recipient will receive and hold such stock subject to the provisions of this Section and any other restrictions set forth in these Bylaws, and there will be no further Transfer of such stock except in accord with this Section and the other provisions of these Bylaws.

(g) The provisions of this Bylaw may be waived with respect to any Transfer either by the corporation, upon duly authorized action of its Board of Directors, or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation (excluding the votes represented by those shares to be transferred by the transferring stockholder). This Bylaw may be amended or repealed either by a duly authorized action of the Board of Directors or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation.

(h) Any Transfer, or purported Transfer, of securities of the corporation will be null and void unless the terms, conditions, and provisions of this Bylaw are strictly observed and followed.

(i) The foregoing right of first refusal will terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the Securities Act of 1933, as amended.

(j) The certificates representing shares of Common Stock of the corporation that are subject to the right of first refusal in paragraph (a) of this Section will bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION.”

(k) To the extent this Section conflicts with any written agreements between the corporation and the stockholder attempting to Transfer shares, such agreement will control.

Section 39. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date will, subject to applicable law, not be more than 60 nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders will be at the close of business on the day immediately preceding the day on which notice is given, or if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders will apply to any adjournment of the meeting; *provided, however*, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date will not be more than 10 days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent will, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors will promptly, but in all events within 10 days after the date on which such a request is received, adopt a resolution fixing the record date. If no record date has been fixed by the Board of Directors within 10 days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, will be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation's registered office will be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting will be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

(c) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted, and which record date will be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose will be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 40. Registered Stockholders. The corporation is entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and is not bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it has express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 41. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 35 of these Bylaws), may be signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided, however,* that where any such bond, debenture or other corporate security is authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security is issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or

other corporate security, authenticated by a trustee as aforesaid, will be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who has signed or attested any bond, debenture or other corporate security, or whose facsimile signature appears thereon or on any such interest coupon, has ceased to be such officer before the bond, debenture or other corporate security so signed or attested has been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature has been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 42. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 43. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors thinks conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 44. Fiscal Year. The fiscal year of the corporation will be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 45. Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents.

(a) Directors and Executive Officers. The corporation will indemnify its directors and executive officers (for the purposes of this Article, "executive officers" has the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the fullest extent not prohibited by the DGCL or any other applicable law; *provided, however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, *provided, further*, that the corporation will not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under paragraph (d) of this Section.

(b) Other Officers, Employees and Other Agents. The corporation will have power to indemnify its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors will have the power to delegate the determination of whether indemnification will be given to any such person except executive officers to such officers or other persons as the Board of Directors determines.

(c) Expenses. The corporation will advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director or executive officer of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or executive officer in connection with such proceeding, *provided, however*, that, if the DGCL requires, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) will be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it is ultimately determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this Section, no advance will be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation, in which event this paragraph will not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of a quorum consisting of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Section will be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this Section to a director or executive officer will be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within 90 days of request therefor. The claimant in such enforcement action, if successful in whole or in part, will be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation will be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation will be entitled to raise as a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not

opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his or her conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, will be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Section are not exclusive of any other right that such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL or any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Section will continue as to a person who has ceased to be a director or executive officer and will inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL, or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Section.

(h) Amendments. Any repeal or modification of this Section is only prospective and does not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Section or any portion hereof is invalidated on any ground by any court of competent jurisdiction, then the corporation will nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this Bylaw that has not been invalidated, or by any other applicable law. If this Section is invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation will indemnify each director and executive officer to the full extent under applicable law.

(j) Certain Definitions. For the purposes of this Section, the following definitions apply:

(1) The term “proceeding” is to be broadly construed and includes, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(2) The term “expenses” is to be broadly construed and includes, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(3) The term the “corporation” includes, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger that, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, stands in the same position under the provisions of this Section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(4) References to a “director,” “executive officer,” “officer,” “employee,” or “agent” of the corporation include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(5) References to “other enterprises” include employee benefit plans; references to “fines” include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “serving at the request of the corporation” include any service as a director, officer, employee or agent of the corporation that imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan is deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Section.

ARTICLE XII

NOTICES

Section 46. Notices.

(a) **Notice to Stockholders.** Written notice to stockholders of stockholder meetings will be given as provided in Section 7 of these Bylaws. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by United States mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) **Notice to Directors.** Any notice required to be given to any director may be given by the method stated in paragraph (a) of this Section, or as provided for in Section 21 of these Bylaws. If such notice is not delivered personally, it will be sent to such address as such director has filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) **Affidavit of Mailing.** An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, will in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It is not necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person with Whom Communication Is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person is not required and there is no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting that is taken or held without notice to any such person with whom communication is unlawful has the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate will state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws will be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent is deemed to have been given if such stockholder fails to object in writing to the corporation within 60 days of having been given notice by the corporation of its intention to send the single notice. Any consent is revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 47. Amendments. The Board of Directors is expressly empowered to adopt, amend or repeal Bylaws of the corporation. The stockholders also have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders requires the affirmative vote of the holders of a majority of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

LOANS TO OFFICERS

Section 48. Loans to Officers. Except as otherwise prohibited under applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a Director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors approves, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws is deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

ARTICLE XV

MISCELLANEOUS

Section 49. Annual Report.

(a) Subject to the provisions of paragraph (b) of this Section, the Board of Directors will cause an annual report to be sent to each stockholder of the corporation not later than 120 days after the close of the corporation's fiscal year. Such report will include a balance sheet as of the end of such fiscal year and an income statement and statement of changes in financial position for such fiscal year, accompanied by any report thereon of independent accountants or, if there is no such report, the certificate of an authorized officer of the corporation that such statements were prepared without audit from the books and records of the corporation. When there are more than 100 stockholders of record of the corporation's shares, as determined by Section 605 of the CGCL, additional information as required by Section 1501(b) of the CGCL will also be contained in such report, provided that if the corporation has a class of securities registered under Section 12 of the 1934 Act, the 1934 Act will take precedence. Such report will be sent to stockholders at least 15 days prior to the next annual meeting of stockholders after the end of the fiscal year to which it relates.

(b) If and so long as there are fewer than 100 holders of record of the corporation's shares, the requirement of sending of an annual report to the stockholders of the corporation is hereby expressly waived.

Section 50. Forum. Unless the corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation; (ii) any action asserting a claim of breach of a 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 or any director or officer or other employee of the corporation arising pursuant to any provision of the DGCL, the certificate of incorporation or the Bylaws of the corporation; or (iv) any action asserting a claim against the corporation or any director or officer or other employee of the corporation governed by the internal affairs doctrine.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 5th day of March, 2021, by and among AN2 Therapeutics, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**."

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of Series A Preferred Stock and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer, and other rights pursuant to that certain Investors' Rights Agreement dated as of November 19, 2019, by and among the Company and such Existing Investors (the "**Prior Agreement**"); and

WHEREAS, the Existing Investors are holders of at least two-thirds of the Registrable Securities (as defined in the Prior Agreement), and desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series B Purchase Agreement of even date herewith by and among the Company and such Investors (the "**Purchase Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by such Investors, Existing Investors holding at least two-thirds of the Registrable Securities, and the Company;

NOW, THEREFORE, the Existing Investors hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and the parties to this Agreement further hereby agree as follows:

1. **Definitions.** For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, limited partners, managing member, officer or director of such Person, or any venture capital fund or other investment fund now or hereafter existing that is controlled by one or more general partners, managing members or investment adviser of, or shares the same management company or investment adviser with, such Person, or Immediate Family Members or their affiliated entities of such Person.

1.2 "**Board of Directors**" means the board of directors of the Company.

1.3 "**Certificate of Incorporation**" means the Company's Third Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.4 "**Common Stock**" means shares of the Company's common stock, par value \$0.00001 per share.

1.5 “**Competitor**” means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in infectious disease pharmaceuticals, but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than twenty percent (20)% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the board of directors of any Competitor. Notwithstanding the foregoing, Pfizer Inc. and its controlled Affiliates, including, without limitation, Anacor Pharmaceuticals, Inc. (together, “**Pfizer**”) shall not be deemed a Competitor for the purposes of Section 4.1 herein and none of Adjuvant Global Health Technology Fund L.P. and its Affiliates (“**Adjuvant**”), Bii Biosciences Limited or its controlled Affiliates (“**Bii**”), MGC Venture Partners 2018, LP or its Affiliates (“**MGC**”) or RA Capital (as defined below) shall be deemed a Competitor for the purposes hereof.

1.6 “**Damages**” means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.7 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.8 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 “**FOIA Party**” means a Person that, in the determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 (“**FOIA**”), any state public records access law, any state or other jurisdiction’s laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.11 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.12 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.13 “**GAAP**” means generally accepted accounting principles in the United States.

1.14 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.15 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.16 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.17 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.18 “**Key Employee**” means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.19 “**Major Investor**” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 375,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.20 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase or otherwise acquire such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.21 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.22 “**Preferred Stock**” means shares of the Company’s Series A Preferred Stock and Series B Preferred Stock.

1.23 “**Qualified Investor**” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 350,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.24 “**RA Capital**” means RA Capital Management, L.P. and its Affiliates.

1.25 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.26 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.27 “**Restricted Securities**” means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

1.28 “**SEC**” means the Securities and Exchange Commission.

1.29 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.30 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.31 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.32 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.33 “**Series A Director**” means any director of the Company that the holders of record of the Series A Preferred Stock are entitled to elect pursuant to the Company’s Certificate of Incorporation.

1.34 “**Series A Preferred Stock**” means shares of the Company’s Series A Preferred Stock, par value \$0.00001 per share.

1.35 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$0.00001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) four years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of twenty five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to the Registrable Securities then outstanding, then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least twenty five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$1 million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing for a period of not more than thirty (30) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a), (i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d); provided, that if such withdrawal is during a period the Company has deferred taking action pursuant to Section 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to at least a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable

Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting; provided, however, that no Holder (or any of their assignees) shall be required to make any representations, warranties or indemnities except as they relate to such Holder's ownership of shares and authority to enter into the underwriting agreement and to such Holder's intended method of distribution, and the liability of such Holder shall be several and not joint, and limited to an amount equal to the net proceeds from the offering received by such Holder. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering, unless such offering is the IPO, in which

case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$40,000, of

one counsel for the selling Holders (“**Selling Holder Counsel**”), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information, then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration except to the extent such information has been corrected in a subsequent writing prior to or concurrently with the sale of Registrable Securities to the Person asserting the claim.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such

registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration and has not been corrected in a subsequent writing prior to or concurrently with the sale of Registrable Securities to the Person asserting the claim; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material

fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of at least two-thirds of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would provide to such holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of an IPO), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock, held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO, shall not apply to transactions (including, without limitation, any swap, hedge or similar agreement or arrangement) or announcements, in each case, relating to securities acquired in the IPO or securities acquired in open market or other transactions from and after the IPO or that otherwise do not involve or relate to securities of the Company owned by a Holder prior to the IPO, (b) the sale of any shares of Common Stock (x) purchased by Holder in connection with the IPO, whether or not pursuant to an underwriting agreement, a private placement that is concurrent with the IPO, or otherwise, or (y) acquired in the open market at any time after the IPO, (c) the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and (d) the transfer of any shares to an Affiliate or current or former limited partner of a Holder; provided that the Affiliate or current or former limited partner of a Holder agrees to be bound in writing by the restrictions set forth herein, and shall be applicable to the Holders only if all officers, directors and stockholders individually, and together with their Affiliates, owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock) are subject to the same restrictions. The underwriters in

connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the IPO, SEC Rule 144, in each case, to be bound by the terms of this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a

registration statement under the Securities Act covering the proposed transaction or following the IPO, the transfer is made pursuant to SEC Rule 144, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer, provided that no such notice shall be required in connection if the intended sale, pledge or transfer complies with SEC Rule 144. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes or transfers Restricted Securities to (i) an Affiliate of such Holder, (ii) solely where no consideration is paid to Holder at the time of such transfer in connection with such transfer, to a current or former limited partner of such Holder, or (iii) in any transactions in which a Holder exercises its co-sale rights under the Right of First Refusal and Co-Sale Agreement (as such term is defined in the Purchase Agreement); provided, in each case, that with respect to transfers under the foregoing clause (y), each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of:

(a) such time after the IPO as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration (and without the requirement for the Company to be in compliance with the current public information required under subsection (c)(1) of SEC Rule 144) and such Holder (together with its "affiliates" determined under SEC Rule 144) holds less than one percent (1%) of the outstanding capital stock of the Company; and

(b) the fifth anniversary of the IPO.

2.14 Transfer and Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 2 may be assigned by a Holder to a transferee or assignee of Registrable Securities (for so long as such shares remain Registrable

Securities) that (a) is a subsidiary, parent, general partner, limited partner, retired partner, member or retired member, of a Holder that is a corporation, partnership or limited liability company, (b) is a Holder's family member or trust for the benefit of an individual Holder, (c) acquires at least five percent of the then-outstanding Registrable Securities or (d) is an Affiliate of such Holder; provided, however, that (i) the transferor shall, within ten days after such transfer, furnish to the Company written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned and (ii) such transferee shall agree to be subject to all restrictions set forth in this Agreement.

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company beginning with fiscal year 2021 (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP); and

(c) as soon as practicable, but in any event no later than forty-five (45) days after the start of each fiscal year, a budget for such fiscal year (collectively, the "**Budget**"), approved by the Board of Directors and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company; and

(d) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1(d) to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date thirty (30) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Observer Rights. As long as RA Capital owns not less than 425,000 shares of Series B Preferred Stock (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of RA Capital (the "**RA Board Observer**") to attend all meetings of the Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a Competitor. The Company shall reimburse the out-of-pocket travel expenses incurred by the RA Board Observer in connection with attending meetings of the Board or any of the committees of the Company.

3.4 Termination of Information and Observer Rights. The covenants set forth in Subsection 3.1, Subsection 3.2 and Subsection 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act.

3.5 Confidentiality. Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.5; (iii) to any existing or prospective Affiliate, any former partner who retained an economic interest in such investor, partner, member, stockholder, limited partner or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; (iv) to the extent required in connection with any routine or periodic examination or similar process by any regulatory or self-regulatory body or authority not specifically directed at the Company or the confidential information obtained from the Company pursuant to the terms of the Agreement, including, without limitation, quarterly or annual reports, or (v) as may otherwise be required by law, regulation, rule, court order or subpoena, provided that, with respect to this clause (v), the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Qualified Investor. A Qualified Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Qualified Investor ("**Investor Beneficial Owners**"); provided that each such Affiliate or Investor Beneficial Owner (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Amended and Restated Voting Agreement and Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement (provided that any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and as a Qualified Investor under Subsection 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Qualified Investor holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the "**Offer Notice**") to each Qualified Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Qualified Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Qualified Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Qualified Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities) held by all the Qualified Investors (including all shares of Common Stock issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by the Qualified Investors). At the expiration of such twenty (20) day period, the Company shall promptly notify each Qualified Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Qualified Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Qualified Investors were entitled to subscribe but that were not subscribed for by the Qualified Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Qualified Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company’s Certificate of Incorporation) and (ii) shares of Common Stock issued in the IPO.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect upon the earliest of (i) immediately before the consummation of the IPO, or (ii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, provided that the consideration received pursuant to such Deemed Liquidation Event is in the form of cash and/or publicly traded securities, or if the Investors receive participation rights from the acquiring company or other successor to the Company reasonably comparable to those set forth in this Section 4 whichever event occurs first.

4.3 Transfer of Rights of First Offer. The rights of first offer of each Investor under this Section 4 may be assigned by a Holder to a transferee or assignee of Registrable Securities (for so long as such shares remain Registrable Securities) that (a) is a subsidiary, parent, general partner, limited partner, retired partner, member or retired member, of a Holder that is a corporation, partnership or limited liability company, (b) is a Holder's family member or trust for the benefit of an individual Holder, (c) acquires at least 5% of the then-outstanding Registrable Securities or (d) is an Affiliate of such Holder; provided, however, that (i) the transferor shall, within ten days after such transfer, furnish to the Company written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned, (ii) such transferee shall agree to be subject to all restrictions set forth in this Agreement, and (iii) any such transferee is not a Competitor.

5. Additional Covenants.

5.1 Insurance. The Company shall maintain its director and officer liability insurance coverage, so long as such insurance is commercially practicable given the Company's financial situation, upon such terms and conditions as may be approved by the Board of Directors.

5.2 Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement; and (ii) each Key Employee to enter into a nonsolicitation agreement, substantially in the form approved by the Board of Directors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the approval of the Board of Directors, including the approval of at least one Series A Director.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including at least one Series A Director, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, including at least one Series A Director, the Company shall retain a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause the shares of Preferred Stock issued pursuant to the Purchase Agreement, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the “Code”), to constitute “qualified small business stock” as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

5.5 Matters Requiring Preferred Director Approval. During such time or times as the holders of Series A Preferred Stock are entitled to elect a Series A Director and such seat is filled, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors (including the approval of at least one Series A Director):

(a) hire, fire, or change the compensation of the executive officers, including approving any option grants; or

(b) increase or decrease the authorized number of directors constituting the Board of Directors.

5.6 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company’s travel policy) in connection with attending meetings of the Board of Directors.

5.7 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company’s Bylaws, its Certificate of Incorporation, or elsewhere, as the case may be.

5.8 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each a “**Fund Director**”) may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the “**Fund Indemnitors**”). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Fund Director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Fund Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Fund Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Fund Director to the extent legally permitted and as required by the Company’s Certificate of Incorporation or Bylaws of the Company (or any agreement between the Company and such Fund Director), without regard to any rights such Fund Director may have against the Fund Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such Fund Director with respect to any claim for which such Fund Director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Fund Director against the Company.

5.9 Right to Conduct Activities. The Company hereby agrees and acknowledges that MGC, Adjuvant and RA Capital (together with their Affiliates) are professional investment funds, and these investment funds (as such), Pfizer and Brie (together with their respective Affiliates) may each make investments in or conduct business with (in the case of Brie and Pfizer) various companies, some of which may be deemed competitive with the Company’s business (as currently conducted or as currently proposed to be conducted). The Company and each Investor hereby agree that, to the extent permitted under applicable law, MGC, Adjuvant, RA Capital, Pfizer and Brie shall not be liable to the Company or any such Investor for any claim arising out of, or based upon, (i) their respective investment in, or conduct of business with, any entity competitive with the Company, or (ii) actions taken by any partner, officer employee or other representative of MGC, Adjuvant, RA Capital, Pfizer or Brie to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company. The Company and each Investor that is a party to this Agreement, acknowledges and agrees that certain of the Investors or their Affiliates may presently have, or may engage in the future, in internal development programs, or may receive information from third parties that relates to, and may develop and commercialize products independently or in cooperation with such third parties, that are similar to or that are directly or indirectly competitive with, the Company’s development programs, products or services. Nothing in this Agreement or any other agreement related to the transactions contemplated by this Agreement, shall in any way preclude or restrict such Investors or their Affiliates from conducting any development program, commercializing any product or service or otherwise engaging in any enterprise, whether or not such development program, product, service or enterprise, competes with those of the Company. Notwithstanding the foregoing, this Section 5.9 shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure or use of the Company’s confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

5.10 **Compliance with Laws.** The Company shall, and shall use its best efforts to cause any direct or indirect subsidiary, whether now in existence or formed in the future, to, comply in all material respects with all applicable laws.

5.11 **FCPA.** The Company agrees that it shall not (and shall not permit any of its subsidiaries or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to, while acting on behalf of the Company or subsidiary) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any foreign official (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the “**FCPA**”)), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and Affiliates to) cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and Affiliates to) maintain systems of internal controls (including, but not limited to, accounting systems, purchasing systems and billing systems) to ensure compliance with the FCPA, the U.K. Bribery Act of 2010, or any other applicable anti-bribery or anti-corruption law. Upon request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws, provided that the Company shall not be obligated to provide information that is covered by attorney-client privilege or considered by the Company to be confidential business proprietary data. The Company shall promptly notify each Investor if the Company becomes aware of any Enforcement Action (as defined in the Purchase Agreement). The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA.

5.12 **Compliance with Global Trade Control Laws.** The Company shall (and shall cause its subsidiaries and affiliates, and its and their respective directors, officers, managers, employees, independent contractors, representatives or agents while acting on behalf of the Company or subsidiary to) comply with all applicable economic sanctions, import, and export control laws, regulations, and orders. The Company has not engaged, and covenants and agrees that it shall not engage, directly or indirectly, in any unauthorized business with, or use, directly or indirectly, any corporate funds to finance the activities of, any Restricted Party or in any Restricted Market. For purposes of this Section 5.12, “**Restricted Parties**” means any individual(s) or entity(ies) on any of the following Restricted Party Lists: the List of Specially Designated Nationals and Blocked Persons, the Foreign Sanctions Evaders List, and the Sectoral Sanctions Identifications List, which are maintained by the Office of Foreign Assets Control of the U.S. Treasury Department, the Entity List, Denied Persons List, or Unverified List, which are maintained by the Bureau of Industry and Security of the U.S. Commerce Department, the U.S. Government Suspension and Debarment List; the HHS OIG Excluded Parties List; the FDA Debarment Lists, or the Consolidated List of Persons, Groups and Entities Subject to E.U. Financial Sanctions; and “**Restricted Market**” means any of the Crimea Region of the Ukraine, Cuba, Iran, North Korea and Syria.

5.13 CFIUS. The Company hereby represents, warrants and covenants to the Investors that it has not taken and shall not take any of the following actions: the design, fabrication, development, testing, production or manufacture of “critical technologies” as defined by 31 C.F.R. § 801.204, as amended.

5.14 Side Letters. The Company agrees and covenants that it will promptly notify (and provide a copy to) RA Capital if it enters into any separate agreements or side letters with any other shareholder of the Company or an affiliate of any such shareholder (other than the Transaction Agreements (as defined in the Purchase Agreement) and employment related agreements in the ordinary course).

5.15 Termination of Covenants. The covenants set forth in this Section 5, except for Subsections 5.7 and 5.8, shall terminate and be of no further force or effect immediately before the consummation of the IPO.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder’s Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder’s Immediate Family Members; or (iii) after such transfer, holds at least 41,736 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder’s Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder’s Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be sent to Josh Seidenfeld, Cooley LLP, 3175 Hanover Street, Palo Alto, CA 94304-1130 and if notice is given to the Investors, a copy shall also be given to Robert Laird, Maynard Cooper & Gale, PC, 3835 Cleghorn Ave., Suite 250, Nashville, TN 37215, and Jennifer Fang, Wilson Sonsini Goodrich & Rosati, 28 State Street, 37th Floor, Boston, MA 02109-1700 and if notice is given to Adjuvant, a copy shall also be given to Deepa M. Rich, Goodwin Procter LLP, 601 Marshall Street, Redwood City, CA 94063.

6.6 Consent to Electronic Notice. Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number set forth below such Investor's name on the Schedules hereto, as updated from time to time by notice to the Company, or as on the books of the Company ("**Electronic Notice**"). To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted Electronic Notice shall be ineffective and deemed to not have been given. Each Investor agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

6.7 Amendments and Waivers. Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of at least 67% of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (a) this

Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, modification, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction), (b) Subsections 3.1 and 3.2, and any other section of this Agreement applicable to the Major Investors (including this clause (b) of this Subsection 6.7) may be amended, modified, terminated or waived with only the written consent of the Company and the holders of at least 67% of the Registrable Securities then outstanding and held by the Major Investors, (c) Section 4 and any other section of this Agreement applicable to the Qualified Investors (including this clause (c) of this Subsection 6.7) may be amended, modified, terminated or waived with only the written consent of the Company and the holders of at least 67% of the Registrable Securities then outstanding and held by the Qualified Investors, (d) Subsection 3.3 may not be amended, modified or terminated and the observance of any term hereof may not be waived without the approval of RA Capital, and (e) Subsection 5.5 may not be amended, modified or terminated and the observance of any term hereof may not be waived without the approval of the Board of Directors, including at least one of the Series A Directors. Further, this Agreement may not be amended, modified or terminated, and provisions hereof may not be waived, in each case, in any way that would adversely affect any Investor in a manner disproportionate to any adverse effect such amendment, modification, termination or waiver would have on other Investors holding the same class of stock as such Investor, hereunder, without the written consent of such adversely impacted Investor. Notwithstanding the foregoing, Schedule A hereto may be amended by the Company from time to time to add transferees of any Registrable Securities in compliance with the terms of this Agreement without the consent of the other parties; and Schedule A hereto may also be amended by the Company after the date of this Agreement without the consent of the other parties to add information regarding any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.10. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision. Notwithstanding anything to the contrary herein, in the event that the rights of a Qualified Investor to purchase New Securities under Section 4 are waived with respect to a particular offering of New Securities without such Qualified Investor's prior written consent (a "**Waived Investor**") and any Qualified Investor that participated in waiving such rights actually purchases New Securities in such offering, then the Company shall grant, and hereby grants, each Waived Investor the right to purchase, in a subsequent closing of such issuance on substantially the same terms and conditions, the same percentage of its full pro rata share of such New Securities as the highest percentage of any such purchasing Qualified Investor.

6.8 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.9 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.10 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof pursuant to the Purchase Agreement, then any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.11 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

6.12 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT

BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.

6.13 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.14 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

AN2 THERAPEUTICS, INC.

By: /s/ Eric Easom

Eric Easom
Chief Executive Officer

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

DAVID SCHNELL TRUST 2000 U/L DTD 5/26/00

By: /s/ David Schnell

By: David Schnell, Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**CITADEL MULTI-STRATEGY EQUITIES MASTER FUND
LTD.**

**BY: CITADEL ADVISORS LLC
ITS: PORTFOLIO MANAGER**

By: /s/ Shellane Mulcahy

Name: Shellane Mulcahy

Title: Authorized Signatory

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

RA CAPITAL HEALTHCARE FUND, L.P.

BY: RA CAPITAL HEALTHCARE FUND GP, LLC

ITS: GENERAL PARTNER

By: /s/ Rajeev Shah

Name: Rajeev Shah

Title: Manager

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

RA CAPITAL NEXUS FUND II, L.P.

BY: RA CAPITAL NEXUS FUND GP, LLC

ITS: GENERAL PARTNER

By: /s/ Rajeev Shah

Name: Rajeev Shah

Title: Manager

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

NEAL R. BRAUWEILER

By: /s/ Neal R. Brauweiler

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

John C. Lechleiter Revocable Trust

By: /s/ John C. Lechleiter

Name: John C. Lechleiter

Title: Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

HATTERAS VENTURE PARTNERS VI, LP

**By: Hatteras Venture Advisors VI, LLC,
Its General Partner**

By: /s/ Clay B. Thorp

Name: Clay B. Thorp

Title: Manager

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

GEORGE T. VOSNOS

By: /s/ George T. Vosnos _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

CHRIS MCGUIRE

By: /s/ Chris McGuire

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BIOTECHNOLOGY VALUE TRADING FUND OS, L.P.

By: /s/ Mark Lampert

Name: Mark Lampert

Title: President BVF Inc., General Partner of BVF
Partners L.P., itself sole member of BVF Partners
OS Ltd., itself GP of Biotechnology Value Trading
Fund OS, L.P

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BIOTECHNOLOGY VALUE FUND, L.P.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: Chief Executive Officer BVF I GP LLC, itself
General Partner of Biotechnology Value Fund, L.P.

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BIOTECHNOLOGY VALUE FUND II, L.P.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: Chief Executive Officer BVF II GP LLC, itself
General Partner of Biotechnology Value Fund II,
L.P.

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

ABERDARE MANAGEMENT COMPANY, LLC

By: /s/ Paul H. Klingenstein

By: Paul H. Klingenstein, its manager

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

ADJUVANT GLOBAL HEALTH TECHNOLOGY FUND L.P.

**BY: ADJUVANT CAPITAL GP, L.P.,
ITS GENERAL PARTNER**

**BY: ADJUVANT CAPITAL MANAGEMENT, LLC, ITS
GENERAL PARTNER**

By: /s/ Kabeer Aziz

Name: Kabeer Aziz

Title: Secretary

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**ADJUVANT GLOBAL HEALTH TECHNOLOGY FUND
DE, L.P.**

**BY: ADJUVANT CAPITAL GP, L.P.,
ITS GENERAL PARTNER**

**BY: ADJUVANT CAPITAL MANAGEMENT, LLC, ITS
GENERAL PARTNER**

By: /s/ Kabeer Aziz

Name: Kabeer Aziz

Title: Secretary

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

AVIDITY CAPITAL FUND II LP

By: /s/ Michael Gregory _____

Name: Michael Gregory

Title: Director

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

AVIDITY MASTER FUND LP

By: /s/ Michael Gregory _____

Name: Michael Gregory

Title: Director

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BETH SMITH

/s/ Beth Smith

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BIROCK VENTURES I, LP

By: BioRock Ventures GP I, LLC,
a Delaware limited liability company

By: /s/ Mary E. Wheeler

Name: Mary E. Wheeler

Title: Managing Member

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BOB BUCH

By: /s/ Bob Buch _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**PTC CUST ROTH CONVERSION IRA FBO BRADLEY
E. COUNTRYMAN ACCT: 49102816**

By: /s/ Bradley Countryman

Name: Bradley Countryman

Title: Owner

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**MILLENNIUM TRUST CO. LLC CUSTODIAN FBO
BRADLEY F COUNTRYMAN ROTH IRA XXXXW7316**

By: /s/ Bradley Countryman

Name: Bradley Countryman

Title: Owner

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BRADLEY F. COUNTRYMAN

By: /s/ Bradley Countryman

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

BRII BIOSCIENCES LIMITED

By: /s/ Zhi Hong, PhD

Name: Zhi Hong, PhD

Title: President and CEO

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MOVING INNOVATIVE INVESTMENTS, LLC

By: /s/ Pamela E. Zipperer-Davis

Name: Pamela E. Zipperer-Davis

Title: Managing Director

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

DREW FRANCIS ORSINGER

By: /s/ Drew Francis Orsinger

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

DS LIQUID DIV RVA MON LLC

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

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INVESTORS:

ELLEN EASOM STURGILL

By: /s/ Ellen Easom Sturgill

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

GAIL A. ORSINGER FAMILY TRUST

By: /s/ Gail Orsinger

Name: Gail Orsinger

Title: Mrs.

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**GARY L WOOD AND LESLIE K. WOOD REVOCABLE
FAMILY TRUST**

By: /s/ Gary Wood

Name: Gary Wood

Title: Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

GRANT BOWERS

By: /s/ Grant Bowers _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

H. STEWART PARKER LIVING TRUST

By: /s/ Stewart Parker

Name: Stewart Parker

Title: Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

JOE C. COOK, III.

By: /s/ Joe C. Cook, Jr. _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

JOE C. COOK, JR.

By: /s/ Joe C. Cook, Jr. _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

KATIE NEWTON EASOM

By: /s/ Katie Newton Easom

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

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INVESTORS:

KENNETH LAKOWSKE

By: /s/ Kenneth Lakowski

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**LONGFELLOW VENTURE PARTNERS III,
LLC
A DELAWARE LIMITED LIABILITY
COMPANY**

By: /s/ William S. Wilson

Name: William S. Wilson

Title: President

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MARK LAKOWSKE

By: /s/ Mark Lakowske _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MGC VENTURE PARTNERS QP 2018, LP

By: MGC VENTURE PARTNERS 2018, GP

ITS: GENERAL PARTNER

By: MGC VP 2018, SLP

ITS: SOLE MEMBER

By: /s/ Rob Readnour

Name: Rob Readnour

Title: Managing Partner

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MGC VENTURE PARTNERS 2018, LP
By: MGC VENTURE PARTNERS 2018, GP
Its: GENERAL PARTNER
By: MGC VP 2018, SLP
ITS: SOLE MEMBER

By: /s/ Rob Readnour
Name: Rob Readnour
Title: Managing Partner

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MICHAEL PENCE

By: /s/ Michael Pence

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MICHAEL WYNE

By: /s/ Michael Wyne

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

**MILLENNIUM TRUST COMPANY LLC FOR THE
BENEFIT OF CHRISTOPHER S. MCGUIRE**

By: /s/ Christopher S. McGuire

Name: Christopher S. McGuire

Title: _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MONASHEE SOLITARIO FUND LP

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MOVING INNOVATIVE INVESTMENTS, LLC

By: /s/ Pamela E. Zipperer-Davis

Name: Pamela E. Zipperer-Davis

Title: President

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

NATE LIPSCOMB

By: /s/ Nate Lipscomb

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

SCOTT MAZUR

By: /s/ Scott Mazur _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

DESOTO INVESTMENTS, LLC

By: /s/ Steven D. Singleton

Name: Steven D. Singleton

Title: President

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

STEVEN WASTIE

By: /s/ Steven Wastie _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

THE JOHN AND SUSAN SHAY LIVING TRUST

By: /s/ Susan Shay
Name: Susan Shay
Title: Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

THE SEARS TRUST

By: /s/ Lowell Sears

Name: Lowell Sears

Title: Trustee

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

TONY MCGUIRE

By: /s/ Tony McGuire

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Vaughn D. Bryson

By: /s/ Vaughn D. Bryson

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Z INVESTMENTS

By: /s/ Joe Zakrzewski
Name: Joe Zakrzewski
Title: _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

AN2 THERAPEUTICS, INC.

AMENDED AND RESTATED 2017 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: February 24, 2017

APPROVED BY THE STOCKHOLDERS: February 24, 2017

AMENDED BY THE BOARD OF DIRECTORS: February 15, 2018

AMENDMENT APPROVED BY THE STOCKHOLDERS: February 15, 2018

AMENDED BY THE BOARD OF DIRECTORS: November 14, 2019

AMENDMENT APPROVED BY THE STOCKHOLDERS: November 14, 2019

AMENDED BY THE BOARD OF DIRECTORS: March 4, 2021

AMENDMENT APPROVED BY THE STOCKHOLDERS: March 4, 2021

TERMINATION DATE: February 23, 2027

1. GENERAL.

(a) Eligible Stock Award Recipients. Employees, Directors and Consultants are eligible to receive Stock Awards.

(b) Available Stock Awards. The Plan provides for the grant of the following types of Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights, (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards and (vi) Other Stock Awards.

(c) Purpose. The Plan, through the grant of Stock Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

2. ADMINISTRATION.

(a) Administration by the Board. The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) Powers of the Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine (A) who will be granted Stock Awards; (B) when and how each Stock Award will be granted; (C) what type of Stock Award will be granted; (D) the provisions of each Stock Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Stock Award; (E) the number of shares of Common Stock subject to, or the cash value of, a Stock Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Stock Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Stock Award fully effective.

(iii) To settle all controversies regarding the Plan and Stock Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which a Stock Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or a Stock Award Agreement, suspension or termination of the Plan will not impair a Participant's rights under the Participant's then-outstanding Stock Award without the Participant's written consent except as provided in subsection (viii) below.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Stock Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Stock Awards available for issuance under the Plan. Except as otherwise provided in the Plan or a Stock Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Stock Award without the Participant's written consent.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 422 of the Code regarding Incentive Stock Options.

(viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock 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 Stock Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been 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, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock Awards without the affected Participant's consent (A) to maintain the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Stock Award solely because it impairs the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Stock Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws.

(ix) 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 Stock Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by 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 Stock Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).

(xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution therefor of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee. 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 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, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(d) Delegation to an Officer. The Board 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 Stock Awards) and, to the extent permitted by applicable law, the terms of such Stock Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(t) below.

(e) Effect of Board's Decision. 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 SUBJECT TO THE PLAN.

(a) Share Reserve.

(i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date will not exceed 1,249,274 shares (the “**Share Reserve**”).

(ii) For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a).

(b) **Reversion of Shares to the Share Reserve.** If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.

(c) **Incentive Stock Option Limit.** Subject to the Share Reserve and Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be a number of shares of Common Stock equal to three multiplied by the Share Reserve.

(d) **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.

4. ELIGIBILITY.

(a) **Eligibility for Specific Stock Awards.** 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 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Stock Awards 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 (i) the stock underlying such Stock Awards is treated as “service recipient stock” under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.

(b) **Ten Percent Stockholders.** A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

(c) Consultants. A Consultant will not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or sale of the Company's securities to such Consultant is not exempt under Rule 701 because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of any other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions.

5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Stock Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Stock Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of 10 years from the date of its grant or such shorter period specified in the Stock Award Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Stock Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Stock Award if such Stock 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 Section 409A of the Code and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have 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 use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the 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 aggregate 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;

(iv) if an 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 that does not exceed the aggregate exercise price; *provided, however*, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the “net exercise,” (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(v) according to a deferred payment or similar arrangement with the Optionholder; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(vi) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Stock Award Agreement.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Stock Award Agreement evidencing such SAR.

(e) Transferability of Options and SARs. The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) Restrictions on Transfer. An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.

(ii) Domestic Relations Orders. Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2). 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.

(iii) Beneficiary Designation. Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, upon the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Stock Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Stock Award Agreement, which period will not be less than 30 days if necessary to comply with applicable laws unless such termination is for Cause) and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

(h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement. In addition, unless otherwise provided in a Participant's Stock Award Agreement, if the sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of the period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Award Agreement for exercisability after the termination of the Participant's Continuous Service (for a reason other than death), then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of such Option or SAR as set forth in the Stock Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the date of such termination of Continuous Service.

(l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Stock Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Stock Award Agreement, in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision 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. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

(m) Early Exercise of Options. An Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 8(l), any unvested shares of Common Stock so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate. Provided that the "Repurchase Limitation" in Section 8(l) is not violated, the Company will not be required to exercise its repurchase right until at least six months (or such longer or shorter period of time required to avoid classification of the Option as a liability for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option Agreement.

(n) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 8(l), the Option or SAR may include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Participant pursuant to the exercise of the Option or SAR.

(o) Right of First Refusal. The Option or SAR may include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the Participant of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option or SAR. Such right of first refusal will be subject to the "Repurchase Limitation" in Section 8(l). Except as expressly provided in this Section 5(o) or in the Stock Award Agreement, such right of first refusal will otherwise comply with any applicable provisions of the bylaws of the Company.

6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARs.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock underlying a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, 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 legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 8(l), shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, 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 that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the will Board deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

(c) Other Stock Awards. Other forms of Stock 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 of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. COVENANTS OF THE COMPANY.

(a) Availability of Shares. The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Stock Awards.

(b) Securities Law Compliance. The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock 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 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 of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of a Stock Award or the subsequent issuance of cash or Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) No Obligation to Notify or Minimize Taxes. The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Stock Awards will constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Stock Awards. Corporate action constituting a grant by the Company of a Stock 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 Stock 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 constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement or related grant documents as a result of a clerical error in the papering of the Stock 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 Stock Award Agreement or related grant documents.

(c) 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 a Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Stock Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to the Stock Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock 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 Stock Award was granted or will affect the right of the Company or an Affiliate to terminate (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 in which the Company or the Affiliate is incorporated, as the case may be.

(e) 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 Stock Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares subject to any portion of such Stock Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Stock Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Stock Award that is so reduced or extended.

(f) Incentive Stock Option Limitations. 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).

(g) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that the Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(h) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to a Stock 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 Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from a Stock Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Stock Award Agreement.

(i) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(j) 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 Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) Compliance with Section 409A of the Code. To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements shall be interpreted in accordance with Section 409A of the Code. Notwithstanding anything to the contrary in the Plan (and unless the Stock Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding a Stock Award that constitutes “deferred compensation” under Section 409A of the Code is a “specified employee” for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant’s “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) 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 of the Code, 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.

(l) Repurchase Limitation. The terms of any repurchase right will be specified in the Stock Award Agreement. The repurchase price for vested shares of Common Stock will be the Fair Market Value of the shares of Common Stock on the date of repurchase. The repurchase price for unvested shares of Common Stock will be the lower of (i) the Fair Market Value of the shares of Common Stock on the date of repurchase or (ii) their original purchase price. However, the Company will not exercise its repurchase right until at least six months (or such longer or shorter period of time necessary to avoid classification of the Stock Award as a liability for financial accounting purposes) have elapsed following delivery of shares of Common Stock subject to the Stock Award, unless otherwise specifically provided by the Board.

9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. 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 that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), and (iii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock 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 Stock Award is providing Continuous Service, *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock 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 Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock 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 a Stock Award. In the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board may take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

(i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

(ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

(iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction; *provided, however*, that the Board may require Participants to complete and deliver to the Company a notice of exercise before the effective date of a Corporate Transaction, which exercise is contingent upon the effectiveness of such Corporate Transaction;

(iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

(v) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration (including no consideration) as the Board, in its sole discretion, may consider appropriate; and

(vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise. For clarity, this payment may be zero (\$0) if the value of the property is equal to or less than the exercise price. Payments under this provision may be delayed to the same extent that payment of consideration to the holders of the Company's Common Stock in connection with the Corporate Transaction is delayed as a result of escrows, earn outs, holdbacks or any other contingencies.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(d) 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 the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

10. PLAN TERM; EARLIER TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan will automatically terminate on the day before the 10th anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan will not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant or as otherwise permitted in the Plan.

11. EFFECTIVE DATE OF PLAN.

This Plan will become effective on the Effective Date.

12. CHOICE OF LAW.

The laws of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. DEFINITIONS. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "Affiliate" means, at the time of determination, any "parent" or "majority-owned subsidiary" of the Company, as such terms are defined in Rule 405. The Board will have the authority to determine the time or times at which "parent" or "majority-owned subsidiary" status is determined within the foregoing definition.

(b) "Board" means the Board of Directors of the Company.

(c) "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 Stock Award after the Effective Date 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.

(d) "Cause" will have 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; (iv) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (v) 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 Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock 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.

(e) "**Change in Control**" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(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 will 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 will 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; or

(iii) 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.

Notwithstanding the foregoing definition or any other provision of this Plan, (A) the term Change in Control will 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 will supersede the foregoing definition with respect to Stock 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 will apply.

(f) “**Code**” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) “**Committee**” means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) “**Common Stock**” means the common stock of the Company.

(i) “**Company**” means AN2 Therapeutics, Inc., a Delaware corporation.

(j) “**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.

(k) “**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 in its sole discretion, 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 a Stock 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.

(l) “**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.

(m) “**Director**” means a member of the Board.

(n) “**Disability**” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than twelve (12) months as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) 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.

(o) “**Effective Date**” means the effective date of this Plan, which is the earlier of (i) the date that this Plan is first approved by the Company’s stockholders, and (ii) the date this Plan is adopted by the Board.

(p) “**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.

(q) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(r) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(s) “**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 Date, 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.

(t) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined by the Board in compliance with Section 409A of the Code or, in the case of an Incentive Stock Option, in compliance with Section 422 of the Code.

(u) “**Incentive Stock Option**” means an option granted pursuant to Section 5 of the Plan that is intended to be, and that qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(v) “**Nonstatutory Stock Option**” means an option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

- (w) “**Officer**” means any person designated by the Company as an officer.
- (x) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
- (y) “**Option Agreement**” means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.
- (z) “**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.
- (aa) “**Other Stock 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 6(c).
- (bb) “**Other Stock Award Agreement**” means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.
- (cc) “**Own,**” “**Owned,**” “**Owner,**” “**Ownership**” 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.
- (dd) “**Participant**” means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.
- (ee) “**Plan**” means this 2017 Equity Incentive Plan.
- (ff) “**Restricted Stock Award**” means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).
- (gg) “**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. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.
- (hh) “**Restricted Stock Unit Award**” means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).
- (ii) “**Restricted Stock Unit Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.
- (jj) “**Rule 405**” means Rule 405 promulgated under the Securities Act.
- (kk) “**Rule 701**” means Rule 701 promulgated under the Securities Act.
- (ll) “**Securities Act**” means the Securities Act of 1933, as amended.

(mm) “**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 5.

(nn) “**Stock Appreciation Right Agreement**” means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

(oo) “**Stock Award**” means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right or any Other Stock Award.

(pp) “**Stock Award Agreement**” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

(qq) “**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%.

(rr) “**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.

Additional Terms/Acknowledgements: Optionholder acknowledges receipt of, and understands and agrees to, this Stock Option Grant Notice, the Option Agreement and the Plan. Optionholder acknowledges and agrees that this Stock Option Grant Notice and the Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionholder further acknowledges that as of the Date of Grant, this Stock Option Grant Notice, the Option Agreement, and the Plan set forth the entire understanding between Optionholder and the Company regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of (i) options previously granted and delivered to Optionholder, and (ii) the following agreements only. This Stock Option Grant Notice and any notices, agreements or other documents related thereto (the "**Option Documents**") may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. The Option Documents may also be executed and delivered by facsimile signature, PDF or any electronic signature complying with the U.S. federal ESIGN Act of 2000 (e.g., www.docusign.com).

OTHER AGREEMENTS:

By accepting this option, you consent to receive such 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.

AN2 THERAPEUTICS, INC.

OPTIONHOLDER:

By: _____
Signature

Signature

Title: _____

Date: _____

Date: _____

ATTACHMENTS: Option Agreement, Amended and Restated 2017 Equity Incentive Plan and Notice of Exercise

ATTACHMENT I
OPTION AGREEMENT

AN2 THERAPEUTICS, INC.
AMENDED AND RESTATED 2017 EQUITY INCENTIVE PLAN
OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice (“**Grant Notice**”) and this Option Agreement, **AN2 THERAPEUTICS, INC.** (the “**Company**”) has granted you an option under its Amended and Restated 2017 Equity Incentive Plan (the “**Plan**”) to purchase the number of shares of the Company’s Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the “**Date of Grant**”). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

- 1. VESTING.** Your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.
- 2. NUMBER OF SHARES AND EXERCISE PRICE.** The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.
- 3. EXERCISE RESTRICTION FOR NON-EXEMPT EMPLOYEES.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a “**Non-Exempt Employee**”), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your “retirement” (as defined in the Company’s benefit plans).
- 4. EXERCISE PRIOR TO VESTING (“EARLY EXERCISE”).** If permitted in your Grant Notice (*i.e.*, the “Exercise Schedule” indicates “Early Exercise Permitted”) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however*, that:
 - (a)** a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;
 - (b)** any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company’s form of Early Exercise Stock Purchase Agreement;

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds \$100,000, your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. METHOD OF PAYMENT. You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner *permitted by your Grant Notice*, which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

(b) Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

6. WHOLE SHARES. You may exercise your option only for whole shares of Common Stock.

7. SECURITIES LAW COMPLIANCE. In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. TERM. You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, 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, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however*, that if during any part of such three month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three months after the termination of your Continuous Service; *provided further*, that if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven months after the Date of Grant, and (B) the date that is three months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) 12 months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

(d) 18 months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the 10th anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that 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 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. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three months after the date your employment with the Company or an Affiliate terminates.

9. EXERCISE.

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will 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 Grant or within one year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising 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 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 2711 or NYSE Member Rule 472 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 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. TRANSFERABILITY. Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(c) **Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party

who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. OPTION NOT A SERVICE CONTRACT. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

12. WITHHOLDING OBLIGATIONS.

(a) At the time you exercise your option, in whole or in part, and 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 "same day sale" 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 of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

13. TAX CONSEQUENCES. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of

Grant and there is no other impermissible deferral of compensation associated with the option. Because the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you will 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 the valuation determined by the Board is less than the "fair market value" as subsequently determined by the Internal Revenue Service.

14. NOTICES. Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such 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.

15. GOVERNING PLAN DOCUMENT. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control.

ATTACHMENT II
AMENDED AND RESTATED 2017 EQUITY INCENTIVE PLAN

AN2 THERAPEUTICS, INC.

EARLY EXERCISE STOCK PURCHASE AGREEMENT
UNDER THE 2017 EQUITY INCENTIVE PLAN

THIS AGREEMENT is made by and between AN2 THERAPEUTICS, INC., a Delaware corporation (the “Company”), and the individual designated on the signature page hereto as a Purchaser (“Purchaser”).

RECITALS:

A. Purchaser holds a stock option dated _____ to purchase shares of common stock (“Common Stock”) of the Company (the “Option”) pursuant to the Company’s 2017 Equity Incentive Plan (the “Plan”).

B. The Option consists of a Stock Option Grant Notice and a Stock Option Agreement.

C. Purchaser desires to exercise the Option on the terms and conditions contained herein.

D. Purchaser wishes to take advantage of the early exercise provision of Purchaser’s Option and therefore to enter into this Agreement.

The parties agree as follows:

1. INCORPORATION OF PLAN AND OPTION BY REFERENCE. This Agreement is subject to all of the terms and conditions as set forth in the Plan and the Option. If there is a conflict between the terms of this Agreement and/or the Option and the terms of the Plan, the terms of the Plan shall control. If there is a conflict between the terms of this Agreement and the terms of the Option, the terms of the Option shall control. Defined terms not explicitly defined in this Agreement but defined in the Plan shall have the same definitions as in the Plan. Defined terms not explicitly defined in this Agreement or the Plan but defined in the Option shall have the same definitions as in the Option.

2. PURCHASE AND SALE OF COMMON STOCK.

(a) Agreement to purchase and sell Common Stock. Purchaser hereby agrees to purchase from the Company, and the Company hereby agrees to sell to Purchaser, shares of the Common Stock of the Company in accordance with the Notice of Exercise duly executed by Purchaser and attached hereto as Exhibit A.

(b) Closing. The closing hereunder, including payment for and delivery of the Common Stock, shall occur at the offices of the Company immediately following the execution of this Agreement, or at such other time and place as the parties may mutually agree; *provided, however*, that if stockholder approval of the Plan is required before the Option may be exercised, then the Option may not be exercised, and the closing shall be delayed, until such stockholder approval is obtained. If such stockholder approval is not obtained within the time limit specified in the Plan, then this Agreement shall be null and void.

3. UNVESTED SHARE REPURCHASE OPTION.

(a) Repurchase Option. In the event Purchaser's Continuous Service terminates, then the Company shall have an irrevocable option (the "**Repurchase Option**") for a period of six months after said termination (or in the case of shares issued upon exercise of the Option after such date of termination, within six months after the date of the exercise), or such longer period as may be agreed to by the Company and Purchaser (the "**Repurchase Period**"), to repurchase from Purchaser or Purchaser's personal representative, as the case may be, those shares that Purchaser received pursuant to the exercise of the Option that have not as yet vested as of such termination date in accordance with the Vesting Schedule indicated on Purchaser's Stock Option Grant Notice (the "**Unvested Shares**").

(b) Share Repurchase Price. The Company may repurchase all or any of the Unvested Shares at the lower of (i) the Fair Market Value of the such shares (as determined under the Plan) on the date of repurchase, or (ii) the price equal to Purchaser's Exercise Price for such shares as indicated on Purchaser's Stock Option Grant Notice.

4. EXERCISE OF REPURCHASE OPTION. The Repurchase Option shall be exercised by written notice signed by such person as designated by the Company, and delivered or mailed as provided herein. Such notice shall identify the number of shares of Common Stock to be purchased and shall notify Purchaser of the time, place and date for settlement of such purchase, which shall be scheduled by the Company within the term of the Repurchase Option set forth above. In addition, the Company shall be deemed to have exercised the Repurchase Option as of the last day of the Repurchase Period, unless an officer of the Company notifies the holder of the Unvested Shares during the Repurchase Period in writing (delivered or mailed as provided herein) that the Company expressly declines to exercise its Repurchase Option for some or all of the Unvested Shares. The Company shall be entitled to pay for any shares of Common Stock purchased pursuant to its Repurchase Option at the Company's option in cash or by offset against any indebtedness owing to the Company by Purchaser (including without limitation any Promissory Note given in payment for the Common Stock), or by a combination of both. Upon exercise of the Repurchase Option and payment of the purchase price in any of the ways described above, the Company shall become the legal and beneficial owner of the Common Stock being repurchased and all rights and interest therein or related thereto, and the Company shall have the right to transfer to its own name the Common Stock being repurchased by the Company, without further action by Purchaser.

5. CAPITALIZATION ADJUSTMENTS TO COMMON STOCK. In the event of a Capitalization Adjustment, then any and all new, substituted or additional securities or other property to which Purchaser is entitled by reason of Purchaser's ownership of Common Stock shall be immediately subject to the Repurchase Option and be included in the word "Common Stock" for all purposes of the Repurchase Option with the same force and effect as the shares of the Common Stock presently subject to the Repurchase Option, but only to the extent the Common Stock is, at the time, covered by such Repurchase Option. While the total Option Price shall remain the same after each such event, the Option Price per share of Common Stock upon exercise of the Repurchase Option shall be appropriately adjusted.

6. CORPORATE TRANSACTIONS. In the event of a Corporate Transaction, then the Repurchase Option may be assigned by the Company to the successor of the Company (or such successor's parent company), if any, in connection with such Corporate Transaction. To the extent the Repurchase Option remains in effect following such Corporate Transaction, it shall apply to the new capital stock or other property received in exchange for the Common Stock in consummation of the Corporate Transaction, but only to the extent the Common Stock was at the time covered by such right. Appropriate adjustments shall be made to the price per share payable upon exercise of the Repurchase Option to reflect the Corporate Transaction upon the Company's capital structure; *provided, however*, that the aggregate price payable upon exercise of the Repurchase Option shall remain the same.

7. ESCROW OF UNVESTED COMMON STOCK. As security for Purchaser's faithful performance of the terms of this Agreement and to insure the availability for delivery of Purchaser's Common Stock upon exercise of the Repurchase Option herein provided for, Purchaser agrees, at the closing hereunder, to deliver to and deposit with the Secretary of the Company or the Secretary's designee ("**Escrow Agent**"), as Escrow Agent in this transaction, three stock assignments duly endorsed (with date and number of shares blank) in the form attached hereto as Exhibit B, together with a certificate or certificates evidencing all of the Common Stock subject to the Repurchase Option; said documents are to be held by the Escrow Agent and delivered by said Escrow Agent pursuant to the Joint Escrow Instructions of the Company and Purchaser set forth in Exhibit C, attached hereto and incorporated by this reference, which instructions also shall be delivered to the Escrow Agent at the closing hereunder.

8. RIGHTS OF PURCHASER. Subject to the provisions of the Option, Purchaser shall exercise all rights and privileges of a stockholder of the Company with respect to the shares deposited in escrow. Purchaser shall be deemed to be the holder of the shares for purposes of receiving any dividends that may be paid with respect to such shares and for purposes of exercising any voting rights relating to such shares, even if some or all of such shares have not yet vested and been released from the Company's Repurchase Option.

9. LIMITATIONS ON TRANSFER. In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not sell, assign, hypothecate, donate, encumber or otherwise dispose of any interest in the Common Stock while the Common Stock is subject to the Repurchase Option. After any Common Stock has been released from the Repurchase Option, Purchaser shall not sell, assign, hypothecate, donate, encumber or otherwise dispose of any interest in the Common Stock except in compliance with the provisions herein and applicable securities laws. Furthermore, the Common Stock shall be subject to any right of first refusal in favor of the Company or its assignees or other transfer restrictions that may be contained in the Company's Bylaws.

10. RESTRICTIVE LEGENDS. All certificates representing the Common Stock shall have endorsed thereon legends in substantially the following forms (in addition to any other legend which may be required by other agreements between the parties hereto):

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AN OPTION SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR SUCH HOLDER'S PREDECESSOR IN INTEREST, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THIS COMPANY. ANY TRANSFER OR ATTEMPTED TRANSFER OF ANY SHARES SUBJECT TO SUCH OPTION IS VOID WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF THE COMPANY."

(b) "THE 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 A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE COMPANY AND/OR ITS ASSIGNEE(S) AS PROVIDED IN THE BYLAWS OF THE COMPANY AND IN AN AGREEMENT WITH THE COMPANY."

(d) "THE SHARES REPRESENTED BY THIS CERTIFICATE WERE ISSUED PURSUANT TO THE EXERCISE OF A NONSTATUTORY STOCK OPTION."

(e) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED IN THE BYLAWS OF THE COMPANY."

(f) Any legend required by appropriate blue sky officials.

11. INVESTMENT REPRESENTATIONS. In connection with the purchase of the Common Stock, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Common Stock. Purchaser is acquiring the Common Stock for investment for Purchaser's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act.

(b) Purchaser understands that the Common Stock has not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the Common Stock must be held indefinitely unless the Common Stock is subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the Common Stock. Purchaser understands that the certificate evidencing the Common Stock will be imprinted with a legend that prohibits the transfer of the Common Stock unless the Common Stock is registered or such registration is not required in the opinion of counsel for the Company.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, under the Securities Act, as in effect from time to time, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer thereof (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of issuance of the securities, such issuance will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the securities exempt under Rule 701 may be sold by Purchaser 90 days thereafter, subject to the satisfaction of certain of the conditions specified by Rule 144 and the market stand-off provision described in Purchaser's Stock Option Agreement.

(e) In the event that the sale of the Common Stock does not qualify under Rule 701 at the time of purchase, then the Common Stock may be resold by Purchaser in certain limited circumstances subject to the provisions of Rule 144, which requires, among other things: (i) the availability of certain public information about the Company, and (ii) the resale occurring following the required holding period under Rule 144 after Purchaser has purchased, and made full payment of (within the meaning of Rule 144), the securities to be sold.

(f) Purchaser further understands that at the time Purchaser wishes to sell the Common Stock there may be no public market upon which to make such a sale, and that, even if such a public market then exists, the Company may not be satisfying the current public current information requirements of Rule 144 or 701, and that, in such event, Purchaser would be precluded from selling the Common Stock under Rule 144 or 701 even if the minimum holding period requirement had been satisfied.

(g) Purchaser further warrants and represents that Purchaser has either (i) preexisting personal or business relationships, with the Company or any of its officers, directors or controlling persons, or (ii) the capacity to protect his own interests in connection with the purchase of the Common Stock by virtue of the business or financial expertise of Purchaser or of professional advisors to Purchaser who are unaffiliated with and who are not compensated by the Company or any of its affiliates, directly or indirectly. Purchaser further warrants and represents that Purchaser's purchase of the Common Stock was not accomplished by the publication of any advertisement.

12. SECTION 83(b) ELECTION. Purchaser understands that Section 83(a) of the Code taxes as ordinary income the difference between the amount paid for the Common Stock and the fair market value of the Common Stock as of the date any restrictions on the Common Stock lapse. In this context, "restriction" includes the right of the Company to buy back the Common Stock pursuant to the Repurchase Option set forth above. Purchaser understands that Purchaser may elect to be taxed at the time the Common Stock is purchased, rather than when and as the Repurchase Option expires, by filing an election under Section 83(b) (an "**83(b) Election**") of the Code with the Internal Revenue Service within 30 days of the date of purchase, a copy of which is included as Exhibit D. Even if the fair market value of the Common Stock at the time of the execution of this Agreement equals the amount paid for the Common Stock, the 83(b) Election must be made to avoid income under Section 83(a) in the future. Purchaser understands that failure to file such an 83(b) Election in a timely manner may result in adverse tax consequences for Purchaser. Purchaser further understands that Purchaser must file an additional copy of such 83(b) Election with his or her federal income tax return for the calendar year in which the date of this Agreement falls. Purchaser acknowledges that the foregoing is only a summary of the effect of United States federal income taxation with respect to purchase of the Common Stock hereunder, and does not purport to be complete. Purchaser further acknowledges that the Company has directed Purchaser to seek independent advice regarding the applicable provisions of the Code, the income tax laws of any municipality, state or foreign country in which Purchaser may reside, and the tax consequences of Purchaser's death. Purchaser assumes all responsibility for filing an 83(b) Election and paying all taxes resulting from such election or the lapse of the restrictions on the Common Stock.

13. REFUSAL TO TRANSFER. The Company shall not be required (a) to transfer on its books any shares of Common Stock of the Company which shall have been transferred in violation of any of the provisions set forth in this Agreement, or (b) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares shall have been so transferred.

14. NO EMPLOYMENT RIGHTS. This Agreement is not an employment contract and nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company or its Affiliates to terminate Purchaser's employment for any reason at any time, with or without cause and with or without notice.

15. MISCELLANEOUS.

(a) Notices. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed facsimile if sent during normal business hours of the recipient, and if not during normal business hours of the recipient, then on the next business day, (iii) five calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one business day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the other party hereto at such party's address hereinafter set forth on the signature page hereof, or at such other address as such party may designate by 10 days advance written notice to the other party hereto.

(b) Successors and Assigns. This Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer herein set forth, be binding upon Purchaser, Purchaser's successors, and assigns. The Company may assign the Repurchase Option hereunder at any time or from time to time, in whole or in part.

(c) Attorneys' Fees; Specific Performance. Purchaser shall reimburse the Company for all costs incurred by the Company in enforcing the performance of, or protecting its rights under, any part of this Agreement, including reasonable costs of investigation and attorneys' fees. It is the intention of the parties that the Company, upon exercise of the Repurchase Option and payment for the shares repurchased, pursuant to the terms of this Agreement, shall be entitled to receive the Common Stock, *in specie*, in order to have such Common Stock available for future issuance without dilution of the holdings of other stockholders. Furthermore, it is expressly agreed between the parties that money damages are inadequate to compensate the Company for the Common Stock and that the Company shall, upon proper exercise of the Repurchase Option, be entitled to specific enforcement of its rights to purchase and receive said Common Stock.

(d) Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware. The parties agree that any action brought by either party to interpret or enforce any provision of this Agreement shall be brought in, and each party agrees to, and does hereby, submit to the jurisdiction and venue of, the appropriate state or federal court for the district encompassing the Company's principal place of business.

(e) Further Execution. The parties agree to take all such further action(s) as may reasonably be necessary to carry out and consummate this Agreement as soon as practicable, and to take whatever steps may be necessary to obtain any governmental approval in connection with or otherwise qualify the issuance of the securities that are the subject of this Agreement.

(f) Independent Counsel. Purchaser acknowledges that this Agreement has been prepared on behalf of the Company by Cooley LLP, counsel to the Company and that Cooley LLP does not represent, and is not acting on behalf of, Purchaser. Purchaser has been provided with an opportunity to consult with Purchaser's own counsel with respect to this Agreement.

(g) Entire Agreement; Amendment. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes and merges all prior agreements or understandings, whether written or oral. This Agreement may not be amended, modified or revoked, in whole or in part, except by an agreement in writing signed by each of the parties hereto.

(h) Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(i) Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. This Agreement may also be executed and delivered by facsimile signature, PDF or any electronic signature complying with the U.S. federal ESIGN Act of 2000 (e.g., www.docusign.com).

The parties hereto have executed this Agreement as of _____, 2017.

COMPANY:

AN2 THERAPEUTICS, INC.

By: _____

Name: _____

Title: _____

PURCHASER:

(Signature)

Name (Please Print)

ATTACHMENTS:

- Exhibit A Notice of Exercise
- Exhibit B Assignment Separate from Certificate
- Exhibit C Joint Escrow Instructions
- Exhibit D Form of 83(b) Election

[SIGNATURE PAGE TO EARLY EXERCISE STOCK PURCHASE AGREEMENT]

EXHIBIT A

NOTICE OF EXERCISE

NOTICE OF EXERCISE

AN2 Therapeutics, Inc.
PO Box 418
Menlo Park, California 94026

Date of Exercise: _____

This constitutes notice to **AN2 THERAPEUTICS, INC.** (the "**Company**") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "**Shares**") for the price set forth below.

Type of option (check one):	Incentive <input type="checkbox"/>	Nonstatutory <input type="checkbox"/>
Stock option dated:	_____	_____
Number of Shares as to which option is exercised:	_____	_____
Certificates to be issued in name of:	_____	_____
Total exercise price:	\$ _____	\$ _____
Cash payment delivered herewith:	\$ _____	\$ _____
Regulation T Program (cashless exercise ¹)	\$ _____	\$ _____
Value of _____ Shares delivered herewith ² :	\$ _____	\$ _____

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2017 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within fifteen (15) days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two (2) years after the date of grant of this option or within one (1) year after such Shares are issued upon exercise of this option.

- ¹ Shares must meet the public trading requirements set forth in the option agreement.
- ² Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

I further acknowledge and agree that, except for such information as required to be delivered to me by the Company pursuant to the option or the Plan (if any), I will have no right to receive any information from the Company by virtue of the grant of the option or the purchase of shares of Common Stock through exercise of the option, ownership of such shares of Common Stock, or as a result of my being a holder of record of stock of the Company. Without limiting the foregoing, to the fullest extent permitted by law, I hereby waive all 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 or the Company's capital stock (the "**Inspection Rights**"). I 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.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, 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 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 shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (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. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

(Signature)

Name (Please Print)

Address of Record: _____

EXHIBIT B

STOCK ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto **AN2 THERAPEUTICS, INC.**, a Delaware corporation (the "**Company**"), pursuant to the Repurchase Option under that certain Early Exercise Stock Purchase Agreement, dated [_____], by and between the undersigned and the Company (the "**Agreement**") _____ shares of Common Stock of the Company standing in the undersigned's name on the books of the Company represented by Certificate No[s] _____ and does hereby irrevocably constitute and appoint both the Company's Secretary and the Company's attorney, or either of them, to transfer said stock on the books of the Company with full power of substitution in the premises. This Assignment may be used only in accordance with and subject to the terms and conditions of the Agreement, in connection with the repurchase of shares of Common Stock issued to the undersigned pursuant to the Agreement, and only to the extent that such shares remain subject to the Company's Repurchase Option under the Agreement.

Dated: _____
(leave blank)

(Signature)

Name (Please Print)

INSTRUCTION: *Please do not fill in any blanks other than the signature line. Do not fill in the date line.* The purpose of this Assignment is to enable the Company to exercise its Repurchase Option set forth in the Agreement without requiring additional signatures on the part of Purchaser.

EXHIBIT C
JOINT ESCROW INSTRUCTIONS

JOINT ESCROW INSTRUCTIONS

_____, 20__

Secretary
AN2 Therapeutics, Inc.
PO Box 418
Menlo Park, California 94026

Ladies and Gentlemen:

As Escrow Agent for both **AN2 Therapeutics, Inc.**, a Delaware corporation ("**Company**") and the purchaser listed on the signature page hereto ("**Purchaser**"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of that certain Early Exercise Stock Purchase Agreement dated as of _____ ("**Agreement**"), to which a copy of these Joint Escrow Instructions is attached as an Exhibit, in accordance with the following instructions:

1. In the event Company or an assignee shall elect to exercise the Repurchase Option set forth in the Agreement, the Company or its assignee will give to Purchaser and you a written notice specifying the number of shares of stock to be acquired and the time for a closing thereunder at the principal office of the Company. Purchaser and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

2. At the closing, you are directed (a) to date the stock assignments necessary for the transfer in question, (b) to fill in the number of shares being transferred, and (c) to deliver the same, together with the certificate evidencing the shares of stock to be transferred, to the Company.

3. Purchaser irrevocably authorizes the Company to deposit with you any certificates evidencing shares of stock to be held by you hereunder and any additions and substitutions to said shares as specified in the Agreement. Purchaser does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such securities all documents necessary or appropriate to make such securities negotiable and complete any transaction herein contemplated, including but not limited to any appropriate filing with state or government officials or bank officials. Subject to the provisions of this paragraph 3, Purchaser shall exercise all rights and privileges of a stockholder of the Company while the stock is held by you.

4. This escrow shall terminate and the shares of stock held hereunder shall be released in full upon the exercise or expiration in full of the Repurchase Option, whichever occurs first.

5. If at the time of termination of this escrow under Section 4 herein you should have in your possession any documents, securities, or other property belonging to Purchaser, you shall deliver all of the same to Purchaser and shall be discharged of all further obligations hereunder; provided, however, that if at the time of termination of this escrow you are advised by the Company that any property subject to this escrow is the subject of a pledge or other security agreement, you shall 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 shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall 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. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Purchaser while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys shall 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 entity, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree of any court, you shall 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 shall not be liable in any respect on account of the identity, authorities or rights of the parties executing or delivering or purporting to execute or deliver these Joint Escrow Instructions documents or papers deposited or called for hereunder.

10. You shall 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 shall terminate if you shall cease to be Secretary of the Company or if you shall resign by written notice to the Company. In the event of any such termination, the Secretary of the Company shall automatically become the successor Escrow Agent unless the Company shall appoint another successor Escrow Agent, and Purchaser hereby confirms the appointment of such successor as Purchaser's attorney-in-fact and agent to the full extent of your appointment.

12. If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

13. It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute shall have 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 shall be under no duty whatsoever to institute or defend any such proceedings.

14. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient, and if not during normal business hours of the recipient, then on the next business day, (c) five (5) calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the other party hereto at such party's address set forth below, or at such other address as such party may designate by ten (10) days advance written notice to the other party hereto.

Company: AN2 Therapeutics, Inc.
PO Box 418
Menlo Park, California 94026
Attn: Chief Executive Officer

Purchaser: _____

Escrow Agent: AN2 Therapeutics, Inc.
PO Box 418
Menlo Park, California 94026
Attn: Secretary

15. By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions; you do not become a party to the Agreement.

16. You shall be entitled to employ such legal counsel and other experts (including, without limitation, the firm of Cooley LLP) as you may deem necessary properly to advise you in connection with your obligations hereunder. You may rely upon the advice of such counsel, and you may pay such counsel reasonable compensation therefor. The Company shall be responsible for all fees generated by such legal counsel in connection with your obligations hereunder.

17. This instrument shall 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” and “your” herein refer to the original Escrow Agents and to any and all successor Escrow Agents. It is understood and agreed that the Company may at any time or from time to time assign its rights under the Agreement and these Joint Escrow Instructions in whole or in part.

[Remainder of page intentionally left blank]

18. These Joint Escrow Instructions shall be governed by and interpreted and determined in accordance with the laws of the State of Delaware. The parties hereby expressly consent to the personal jurisdiction of the state and federal courts located in the county in which the Company has its principal offices for any lawsuit arising from or related to this Agreement.

Very truly yours,

COMPANY:

AN2 THERAPEUTICS, INC.

By: _____

Name: _____

Title: _____

PURCHASER:

(Signature)

Name (Please Print)

ESCROW AGENT:

LUCY O. DAY, SECRETARY

[SIGNATURE PAGE TO JOINT ESCROW INSTRUCTIONS]

EXHIBIT D

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 fill in your [social security number][taxpayer identification number] and sign the election and cover letter, then proceed as follows:

- (a) Make **five** copies of the original completed Section 83(b) election form.
- (b) Send the original completed election form, one copy of the completed election form, the cover letter, and a self-addressed stamped return envelope to the Internal Revenue Service Center where you would otherwise file your tax return³. 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, is also recommended.
- (c) Deliver one copy of the completed election form to the Company.
- (d) Attach one copy of the completed election form to your federal personal income tax return (Form 1040) when you file it for the year.
- (e) Attach one copy of the completed election form to your state personal income tax return when you file it for the year (assuming you file a state income tax return).
- (f) Retain one copy of the completed election form for your personal permanent records.

Please note that the election must be filed with the IRS within 30 days of the date of your restricted stock grant. 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.

³ 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 2015, 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>.

Department of the Treasury
 Internal Revenue Service
 [City, State Zip]⁴[Austin, TX 73301-0215
 USA]⁵

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]: _____⁶
 Address: _____

Taxable year: Calendar year 201_.⁷

2. The property that is the subject of this election: [#] shares of common stock of [Company], a [State] corporation (the “Company”).

⁴ 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”.

⁵ 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 2015, 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>.

⁶ If you 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.

⁷ If an entity is the service provider, instead use “Fiscal year ending ____.”

3. **The property was transferred on:** [•], 201_.
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. Vesting accelerates upon certain events, including certain events resulting in the undersigned's termination of employment, and certain changes in control of the Company.]⁸
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:** \$[•].⁹

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, if any. 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]

⁸ Conform to award. E.g., does award accelerate upon a termination of employment and/or a change in control?

⁹ 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 AN2 Therapeutics, 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

ATTACHMENT III
NOTICE OF EXERCISE

AN2 THERAPEUTICS, INC.
NOTICE OF EXERCISE

AN2 Therapeutics, Inc.
PO Box 418
Menlo Park, California 94026

Date of Exercise: _____

This constitutes notice to **AN2 THERAPEUTICS, INC.** (the "**Company**") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "**Shares**") for the price set forth below.

Type of option (check one):	Incentive <input type="checkbox"/>	Nonstatutory <input type="checkbox"/>
Stock option dated:	_____	_____
Number of Shares as to which option is exercised:	_____	_____
Certificates to be issued in name of:	_____	_____
Total exercise price:	\$ _____	\$ _____
Cash payment delivered herewith:	\$ _____	\$ _____
Regulation T Program (cashless exercise ¹)	\$ _____	\$ _____
Value of _____ Shares delivered herewith ² :	\$ _____	\$ _____

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2017 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, 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 of this option or within one year after such Shares are issued upon exercise of this option. I further agree that this Notice of Exercise may be executed and delivered by facsimile signature, PDF or any electronic signature complying with the U.S. federal ESIGN Act of 2000 (e.g., www.docusign.com).

¹ Shares must meet the public trading requirements set forth in the option agreement.

² Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

I hereby make the following certifications and representations with respect to the number of Shares listed above, which are being acquired by me for my own account upon exercise of the option as set forth above:

I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), and are deemed to constitute "restricted securities" under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling said Shares, except as permitted under the Securities Act and any applicable state securities laws.

I further acknowledge and agree that, except for such information as required to be delivered to me by the Company pursuant to the option or the Plan (if any), I will have no right to receive any information from the Company by virtue of the grant of the option or the purchase of shares of Common Stock through exercise of the option, ownership of such shares of Common Stock, or as a result of my being a holder of record of stock of the Company. Without limiting the foregoing, to the fullest extent permitted by law, I hereby waive all 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 or the Company's capital stock (the "**Inspection Rights**"). I 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.

I further acknowledge that I will not be able to resell the Shares for at least 90 days after the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934) under Rule 701 and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the option shall have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Company's Certificate of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, 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 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 shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (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. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

(Signature)

Name (Please Print)

Address of Record: _____

