As filed with the Securities and Exchange Commission on September 8, 2022.

Registration No. 333-267022

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

# AMENDMENT NO. 1 TO
# FORM S-1
# REGISTRATION STATEMENT
***Under***
***The Securities Act of 1933***

# THIRD HARMONIC BIO, INC.
**(Exact name of Registrant as specified in its charter)**

| Delaware | 2834 | 83-4553503 |
|---|---|---|
| (State or other jurisdiction of incorporation or organization) | (Primary Standard Industrial Classification Code Number) | (I.R.S. Employer Identification Number) |

**300 Technology Square, 8th Floor**
**Cambridge, Massachusetts 02139**
**(617) 915-6680**
**(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)**

**Natalie Holles**
**Chief Executive Officer**
**Third Harmonic Bio, Inc.**
**300 Technology Square, 8th Floor**
**Cambridge, Massachusetts 02139**
**(617) 915-6680**
**(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 the effective date of this registration statement.**

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

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

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

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

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

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

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

**Registrant hereby amends this Registration Statement on such date or dates as maybe 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.*

***PRELIMINARY PROSPECTUS (Subject to Completion)***
***Issued September 8, 2022***

# *9,000,000 Shares*


*Common Stock*

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***Third Harmonic Bio, Inc. is offering 9,000,000 shares of its common stock. This is our initial public offering of shares of common stock, and no public market currently exists for our common stock. We anticipate that the initial public offering price will be between $16.00 and $18.00 per share.***

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***We have applied to list our common stock on the Nasdaq Global Market, or Nasdaq, under the symbol "THRD." We believe that upon the completion of this offering, we will meet the standards for listing on Nasdaq, and the closing of this offering is contingent upon such listing.***

***We are an "emerging growth company" and a "smaller reporting company" as defined under the federal securities laws 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 risks. See "Risk Factors" beginning on page 14.***

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*PRICE $ A SHARE*

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| | *Price to Public* | *Underwriting Discounts and Commissions(1)* | *Proceeds to Third Harmonic* |
|---|---|---|---|
| *Per Share* | *$* | *$* | *$* |
| *Total* | *$* | *$* | *$* |

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

***We have granted the underwriters the right to purchase up to an additional 1,350,000 shares of our common stock solely to cover over-allotments, if any.***

***The Securities and Exchange Commission and state regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.***

***The underwriters expect to deliver the shares of common stock to purchasers on , 2022.***

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***MORGAN STANLEY*** ***JEFFERIES*** ***COWEN***

*LIFESCI CAPITAL*

***, 2022***

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## PROSPECTUS



**Through and including , 2022 (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 delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.**

Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or the time of any sale of shares of our common stock.

For investors outside of the United States: Neither we nor any of the underwriters have 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 our 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 does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes and the information set forth under the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case included in this prospectus. Some of the statements in this prospectus constitute forward-looking statements that involve risks and uncertainties. See the section titled "Special Note Regarding Forward—Looking Statements" for additional information. Unless the context otherwise requires, we use the terms "Third Harmonic Bio," "the Company," "we," "us" and "our" in this prospectus to refer to the consolidated operations of Third Harmonic Bio, Inc. and its wholly owned subsidiary, THB MS, Inc.*

## THIRD HARMONIC BIO, INC.

### Overview

We are a clinical-stage biopharmaceutical company focused on the development of the next wave of medicine for the treatment of allergic and inflammatory diseases. Our lead product candidate, THB001, is a highly selective, oral small molecule inhibitor of KIT, a cell surface receptor that acts as the master survival and functional regulator of mast cells. Mast cells are a part of the immune system, and dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders including urticaria, asthma and gastrointestinal disorders, among others. KIT inhibition has shown positive clinical responses in mast cell mediated diseases such as asthma and chronic urticaria. In our recently completed Phase 1a clinical trial, THB001 demonstrated dose-dependent reductions of serum tryptase, a key biomarker of mast cell activity which has been shown to correlate with clinical benefit in chronic urticaria patients. We submitted a clinical trial application, or CTA, in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an investigational new drug application, or IND, in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024. We are also exploring development opportunities across a range of other indications where THB001 may provide benefit to patients suffering from mast cell driven inflammation to demonstrate the "pipeline-in-a-product" potential of THB001.

Mast cells are a main driver of allergic inflammatory responses. They are present throughout the body in connective and vascularized tissues, most prominently along surface boundaries with exposure to the external environment: in the skin, the respiratory tract and the gastrointestinal tract. For many patients suffering from allergic conditions, inhibition of mast cell derived mediators, including histamines, leukotrienes, and prostaglandins, has demonstrated insufficient therapeutic value to-date given that many mast cell-driven disorders involve multiple pro-inflammatory mediators. As a result, we believe that targeting mast cells directly through highly selective inhibition of KIT is key to achieving the clinical efficacy needed for broad symptomatic relief across a range of allergic and other inflammatory disorders.

Since KIT is a cell surface receptor that acts as the master regulator of mast cell function and survival, our approach impacts mast cells directly and provides what we believe to be a favorable point of intervention. Furthermore, significant clinical and nonclinical data has been generated internally and by third parties that demonstrate that KIT is a potential target for broad and potentially clinically differentiated inhibition of mast cells. For example, an anti-KIT antibody demonstrated compelling clinical responses in chronic inducible urticaria patients in a third-party Phase 1 trial.

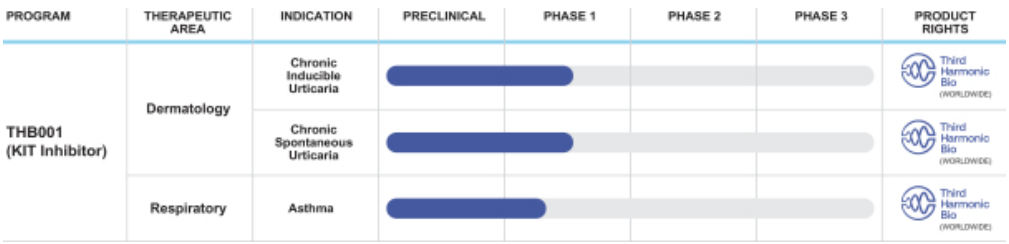
Our lead product candidate THB001 is a potent and highly selective, oral small molecule wild-type KIT inhibitor in development for the treatment of mast cell mediated inflammatory diseases. In nonclinical studies, THB001 demonstrated what we believe to be evidence of highly selective KIT inhibition and mast cell depletion in skin, respiratory and gastrointestinal tissues with a potent therapeutic profile. We believe that chronic

inducible urticaria represents an attractive initial clinical indication for THB001 as a precursor for chronic spontaneous urticaria, given the ability to efficiently evaluate clinical activity outcomes through provocation testing, in concert with biomarker measures of mast cell activity and safety data. Our goal is to be a leader in the oral KIT inhibitor space, and we continue to invest in formulation and discovery for next generation molecules. In addition to initially developing THB001 for treatment of chronic urticaria, we are exploring THB001 as a potential treatment for other indications where mast cell dysfunction plays a key role.

In our recently completed Phase 1a trial in healthy volunteers, we have observed dose dependent increases in THB001 serum concentration levels above the protein binding adjusted KIT cellular $IC_{50}$ value. As signs of the potential efficacy of THB001, we observed that dose levels of 200 mg once daily, or QD, 200 mg twice daily, or BID, and 400 mg BID resulted in dose dependent declines in serum tryptase. The twice daily dose at the 400 mg level of THB001 resulted in a decreased mean serum tryptase level that was at the lower limit of quantification. Reductions in serum tryptase have been associated with a robust clinical response in a clinical trial of an anti-KIT antibody in chronic inducible urticaria patients conducted by a third party. Furthermore, THB001 was well-tolerated, with no serious adverse events, or SAEs, in the trial to-date.

We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, which has been cleared in the Netherlands and Germany. We initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024.

There remains a large unmet need in chronic urticaria. Epidemiological studies indicate that up to 25% of the population suffers from urticaria at some point in their lifetime, with 0.5-1% of the population suffering from the disease at any point in time, suggesting a point prevalence of over 1.5 million patients in the United States. Approximately 70% to 80% of patients with urticaria are women. Many patients are first provided H1 antihistamine therapy when diagnosed with urticaria; however, there remains a large unmet need. Approximately 50% of chronic spontaneous urticaria patients continue to experience itch and hives despite H1 antihistamine treatment at FDA-approved doses. There have been no new approved therapies to treat chronic urticaria in eight years, and the most recently approved treatment, the injectable biologic Xolair, provided complete hive and itch symptom relief to approximately 36% of patients in clinical trials. We believe Xolair is currently addressing less than 20% of eligible patients whose symptoms have failed to be controlled by H1 antihistamine therapy. There is a clear unmet need for chronic urticaria treatments that provide higher levels of complete hive and itch symptom relief, while also providing improved patient comfort and convenience via an oral route of administration. We believe an oral therapy offers clear advantages over an injectable therapy, and an oral therapy with the potential to improve upon the results of the existing standard of care offers a significant opportunity to address a large unmet need. While the potential market opportunity within urticaria alone is vast, dysfunctional mast cell activity has also been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders, including respiratory and gastrointestinal disorders. Furthermore, in nonclinical studies, THB001 has demonstrated the ability to deplete mast cells across different tissue types, which we believe supports its ability to potentially treat a range of mast cell mediated skin, respiratory and gastrointestinal conditions supporting our ultimate goal of THB001 achieving its potential as a "pipeline-in-a-product." The table below reflects our initial targeted indications for THB001.



**Our Team and Investors**

Founded by Atlas Venture in 2019, we are led by a strong management team with diverse backgrounds and significant experience in drug discovery, development and company building, as well as a demonstrated track record of delivering breakthrough therapeutic approaches for patients. Our management team are industry veterans with extensive experience at biopharmaceutical companies such as Audentes, Cadent Therapeutics, Genentech/Roche, Gilead Sciences, Morphic Therapeutic and Pfizer. Together, our team has a proven track record in the discovery, development and commercialization of numerous approved therapeutics.

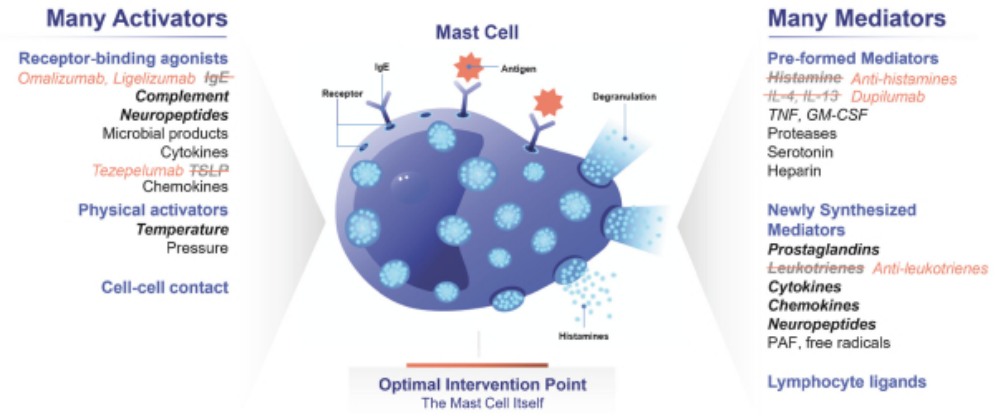
Since our inception, we have been supported by and have raised approximately $155 million of capital from a group of premier life science investors including Atlas Venture, OrbiMed, BVF Partners L.P., General Atlantic, RA Capital, RTW Investments, Boxer Capital, Deep Track Capital, Commodore Capital and Ajax Health|Zeus.

***Mast Cells and Their Role in Immunity***

Mast cells derive from KIT-positive hematopoietic progenitors in the bone marrow and are present throughout the body in connective and vascularized tissues, most prominently along surface boundaries with exposure to the external environment such as the skin, the respiratory tract and the gastrointestinal tract. Their numerous physiological functions include regulation of inflammation, vasodilation, vascular homeostasis and angiogenesis as well as involvement in the control of other elements of the immune response. Dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders, including urticaria, asthma and gastrointestinal disorders, among others.

The cytoplasm of mast cells stores inflammatory mediators including histamine, the proteolytic enzyme tryptase and various cytokines, such as interleukins IL-4, IL-5 and IL-13, and Tumor Necrosis Factor-a, or TNF-a. Mast cells express multiple cell-surface receptors, one of which is FceR that has particularly high affinity for immunoglobin E, or IgE, antibodies. As shown in the figure below, upon the stimulation of IgE, change of temperature, or pressure, a signaling cascade leads to activation of the mast cell and its degranulation resulting in the release of tryptase, histamine and other inflammatory mediators. In addition to IgE dependent activation, other IgE independent stimuli can also trigger mast cell activation. The release of inflammatory mediators can manifest into a broad range of allergic or inflammatory diseases. Moreover, mast cell activation and degranulation lead to the recruitment of other progenitor cells to the specific tissue site and the propagation of the inflammatory response.

*Mast cells mediate multiple pro-inflammatory activities*




The receptor tyrosine kinase KIT, also known as CD117, is recognized as a master regulator of mast cell activity. Under normal physiological conditions, mast cell progenitors circulate in an immature form and only fully develop into mature mast cells upon migration to a specific tissue type. Mature mast cells remain localized to a designated destination. Stem cell factor, or SCF, which is also referred as the c-kit ligand, binds to KIT on the surface of the mast cell, enables signal transduction into the mast cell and activates the KIT-mediated signaling cascade critical to mast cell survival, propagation and differentiation via pathways such as PLCg, JAK2/STAT, PI3K/AKT and RAS/RAF/MEK/ERK. As the master regulator of mast cell function and survival, we believe that the KIT-SCF signaling axis is the optimal intervention point to treat many mast cell mediated diseases. Inhibition of KIT drives both mast cell inactivation and depletion, independent of mast cell activation status.

**Our Solution: The KIT Inhibitor THB001**

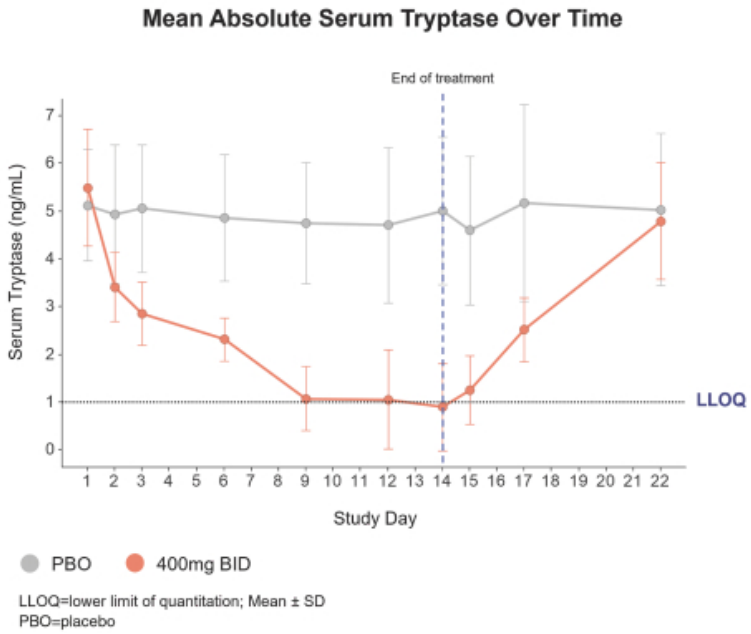
THB001 is a highly potent and selective, small molecule wild-type KIT inhibitor in development for the treatment of mast cell mediated inflammatory diseases. THB001 is designed to offer attractive drug-like properties, including high potency and oral bioavailability, and high selectivity for the wild-type KIT receptor. Based on nonclinical and available clinical data to date, we believe THB001 differentiates from other KIT-targeting therapeutics in the following designed aspects:

- The small molecule modality is anticipated to provide more refined dose titration capabilities than anti-KIT mAbs.
- Oral administration offers improved patient convenience while avoiding mAb-related injection events.
- Higher selectivity for wild-type KIT relative to other small molecule inhibitors.
- THB001 binds intracellularly to an inactive conformation of KIT, avoiding the risk of paradoxical mast cell activation that can result from a KIT mAb binding to the extracellular portion of the KIT receptor.

In our recently completed Phase 1a clinical trial in healthy volunteers, THB001 demonstrated dose-dependent reductions of serum tryptase, a key biomarker of mast cell activity which has been shown to correlate with clinical benefit in chronic urticaria.

As reflected in the chart presented below, which shows absolute serum tryptase levels in patients over time, twice daily dosing of the higher 400 mg level of THB001 resulted in mean serum tryptase which was at the lower limit of quantitation.

*The higher 400 mg BID dose resulted in a serum tryptase level at the lower limit of quantitation.*




***"Pipeline-in-a-Product" Potential of THB001***

Dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders that impact the skin, respiratory tract and gastrointestinal tract. Given KIT is the master regulator of mast cell function and survival, we believe that KIT inhibition is the optimal approach to treat many of these mast cell mediated diseases. As such, we believe THB001 represents a "pipeline-in-a-product" opportunity.

**Our Strategy**

Our goal is to develop the next wave of medicine for the treatment of allergic and inflammatory diseases. The key components of our strategy are to:

- Continue to advance THB001 through clinical development in chronic urticaria.
- Continue to advance THB001 into our second indication in asthma.
- Develop THB001 in a broad range of indications across therapeutic areas where mast cell driven inflammation can benefit from THB001's product profile, including in the skin, respiratory and gastrointestinal tracts.
- Continue to innovate and potentially expand the pipeline through our internal discovery efforts and selectively evaluate strategic collaborations.

**Risk Factors Summary**

Our business is subject to a number of risks and uncertainties, including those highlighted in the section titled "Risk Factors" immediately following this prospectus summary. These risks include, among others, the following:

- We have a limited operating history, have not completed any clinical trials beyond Phase 1, and none of THB001 or any future product candidates have been approved for commercial sale. We have a history of significant net losses since our inception and expect to continue to incur significant losses for the foreseeable future.
- Even if we complete this offering, we will need substantial additional funds to pursue our business objectives, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development programs, commercialization efforts or other operations.
- We have identified a material weakness in our internal control over financial reporting. If we do not remediate the material weakness in our internal control over financial reporting, or if we fail to establish and maintain effective internal control, we may not be able to accurately report our financial results or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in the market price of our common stock.
- Our future performance is substantially dependent on the success of our lead product candidate, THB001, which is currently in clinical development and which has not completed a pivotal trial.
- Drug development is a lengthy and expensive process, and the outcome of clinical testing is inherently uncertain, and results of earlier studies and trials may not be predictive of future trial results. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of THB001 or any future product candidates.
- Our future clinical trials may reveal significant adverse events not seen in our nonclinical studies and may result in a safety profile that could inhibit regulatory approval or market acceptance of any of our product candidates.
- The COVID-19 pandemic could adversely impact our business, including the conduct of our clinical trials.
- We face competition from entities that have made substantial investments into the rapid development of novel treatments for allergic and inflammatory diseases, including large and specialty pharmaceutical and biotechnology companies developing novel treatments and technology platforms. If these companies develop technologies or product candidates more rapidly than we do or their technologies are more effective, our ability to develop and successfully commercialize, if approved, product candidates may be adversely affected.
- We rely, and intend to continue to rely, on third parties to conduct our clinical trials and perform all of our research and nonclinical studies. If these third parties do not satisfactorily carry out their contractual duties, fail to comply with applicable regulatory requirements or do not meet expected deadlines, our development programs may be delayed or subject to increased costs or we may be unable to obtain regulatory approval, each of which may have an adverse effect on our business, financial condition, results of operations and prospects.

- If we are not able to obtain, maintain and enforce patent protection for our technologies or product candidates, development and commercialization, if approved, of our product candidates may be adversely affected.

- The regulatory approval process is highly uncertain, and we may be unable to obtain, or may be delayed in obtaining, U.S. or foreign regulatory approval and, as a result, unable to commercialize our product candidates. Even if we believe our current, or planned clinical trials are successful, regulatory authorities may not agree that they provide adequate data on safety or efficacy.

If we are unable to adequately address these and other risks we face, our business, results of operations, financial condition and prospects may be harmed.

**Corporate and Other Information**

We were incorporated under the laws of the State of Delaware on April 25, 2019, originally under the name Project Ige, Inc. We changed our name on June 28, 2019 to Third Harmonic Bio, Inc.

Our principal executive offices are located at 300 Technology Square, 8th Floor, Cambridge, Massachusetts 02139, and our telephone number is (617) 915-6680. Our website address is www.thirdharmonicbio.com. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated by reference into, this prospectus. We have included our website in this prospectus solely as a textual reference. Investors should not rely on any such information in deciding whether to purchase our common stock.

The mark “Third Harmonic Bio” is our registered or common law trademarks. All other service marks, trademarks and trade names appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and tradenames referred to in this prospectus appear without the ® and ™ symbols, but those 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 right of the applicable licensor to these trademarks and tradenames.

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

As a company with less than $1.07 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies. These provisions include, but are not limited to:

- being permitted to present only two years of consolidated financial statements and only two years of related “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus;

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, on the effectiveness of our internal controls over financial reporting;

- reduced disclosure obligations regarding executive compensation arrangements; and

- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have more than $1.07 billion in annual revenue; (ii) the date we qualify as a “large accelerated filer,”

with at least $700.0 million of equity securities held by non-affiliates; (iii) the date on which we have issued, in any three-year period, more than $1.0 billion in non-convertible debt securities; and (iv) the last day of the fiscal year ending after the fifth anniversary of the completion of this offering.

We have elected to take advantage of certain of the reduced disclosure obligations for emerging growth companies in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

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, until those standards apply to private companies. We have elected to use this extended transition period to enable us to comply with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements may not be comparable to companies that comply with such new or revised accounting standards. Until the date that we are no longer an emerging growth company or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, upon issuance of a new or revised accounting standard that applies to our consolidated financial statements and that has a different effective date for public and private companies, we will disclose the date on which adoption is required for non-emerging growth companies and the date on which we will adopt the recently issued accounting standard.

We are also a “smaller reporting company,” meaning that the market value of our capital stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our capital stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our capital stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited consolidated financial statements in our Annual Report on Form 10-K, we are not required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

For certain risks related to our status as an emerging growth company and a smaller reporting company, see the section titled “Risk Factors—Risks Related to Our Common Stock and This Offering—We are an “emerging growth company” and a “smaller reporting company” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies or smaller reporting companies will make our common stock less attractive to investors.”

**THE OFFERING**

| | |
|---|---|
| Common stock offered by us | 9,000,000 shares |
| Underwriters' over-allotment option of common stock offered by us | 1,350,000 shares |
| Common stock to be outstanding immediately after this offering | 36,793,935 shares (or 38,143,935 shares, if the underwriters exercise their over-allotment option in full) |
| Use of proceeds | We estimate that the net proceeds from this offering will be approximately $139.0 million (or approximately $160.3 million if the underwriters exercise their over-allotment option in full), based upon the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.<br><br>We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to advance the continued clinical development of THB001 for the treatment of urticaria, including through completion of our Phase 1b clinical trial for chronic inducible urticaria and initiation of our Phase 2 clinical trial for chronic spontaneous urticaria; to advance the continued clinical development of THB001 in additional indications, including through completion of a Phase 1b clinical trial for asthma and to fund further development or acquisition of future programs to advance nonclinical and clinical development; and the remainder for potential expansion of our pipeline and other research and development activities, as well as for working capital and other general corporate purposes.<br><br>See the section titled "Use of Proceeds" for additional information. |
| Risk factors | You should read the section titled "Risk Factors" in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock. |
| Proposed Nasdaq trading symbol | We have applied to list our common stock on Nasdaq under the symbol "THRD." The closing of this offering is contingent upon such listing. |

The number of shares of our common stock to be outstanding after this offering is based on 27,793,935 shares of our common stock outstanding as of June 30, 2022 (including (i) 1,410,565 shares of unvested restricted common stock subject to repurchase and (ii) after giving effect to the automatic conversion of all of our shares of convertible preferred stock outstanding as of June 30, 2022, into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering), and excludes:

- 1,803,079 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022 under our 2019 Stock Incentive Plan, or the 2019 Plan, with a weighted-average exercise price of $7.50 per share;

- 753,139 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock granted after June 30, 2022 under our 2019 Plan, with a weighted-average exercise price of $8.60 per share; and
- 5,079,624 shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:
  - 283,808 shares of our common stock reserved for future issuance under our 2019 Plan as of August 31, 2022,
  - 4,426,737 shares of our common stock to be reserved for future issuance under our 2022 Equity Incentive Plan, or the 2022 Plan, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part, and
  - 369,079 shares of our common stock to be reserved for future issuance under our 2022 Employee Stock Purchase Plan, or the ESPP, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part.

Our 2022 Plan and our ESPP provide for automatic annual increases in the number of shares of our common stock reserved thereunder, and our 2022 Plan provides for increases to the number of shares that may be granted thereunder based on shares under our 2019 Plan that expire, are tendered to or withheld by us for payment of an exercise price or for satisfying tax withholding obligations or are forfeited or otherwise repurchased by us. Upon completion of this offering, any remaining shares of our common stock available for issuance under our 2019 Plan will be added to the shares reserved under our 2022 Plan and we will cease granting awards under our 2019 Plan. See the section titled “Executive Compensation—Equity Compensation Plans and Other Benefit Plans” for additional information.

Except as otherwise indicated, all information in this prospectus assumes or gives effect to the following:

- the automatic conversion of all outstanding shares of our convertible preferred stock as of June 30, 2022 into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering;
- a 1-for-2.259 reverse stock split of our outstanding common stock, which was effected on September 7, 2022;
- the filing, and effectiveness of our restated certificate of incorporation and restated bylaws, each of which will occur immediately prior to the completion of this offering;
- no exercise of outstanding options referred to above; and
- no exercise by the underwriters of their over-allotment option.

## SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth our summary consolidated statements of operations and consolidated balance sheet data. The summary consolidated statement of operations data presented below for the years ended December 31, 2020 and 2021 are derived from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the summary consolidated statement of operations data for the six months ended June 30, 2021 and 2022, and the consolidated balance sheet data as of June 30, 2022, from our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as our annual audited summary consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal, recurring adjustments that are necessary to present fairly the unaudited interim condensed consolidated financial statements. The following summary consolidated financial data should be read in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future period and results for the six months ended June 30, 2022 are not necessarily indicative of results to be expected for the full year ending December 31, 2022 or any other period. The summary consolidated financial data in this section are not intended to replace our consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this prospectus.

| (in thousands, except share and per share amounts) | Year Ended December 31, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2021 | 2021 | 2022 |
| | | | (unaudited) | |
| **Consolidated Statements of Operations Data:** | | | | |
| Operating expenses: | | | | |
| Research and development | $ 9,953 | $ 15,748 | $ 6,546 | $ 10,393 |
| General and administrative | 1,166 | 3,256 | 1,010 | 5,177 |
| Total operating expenses | 11,119 | 19,004 | 7,556 | 15,570 |
| Loss from operations | 11,119 | 19,004 | 7,556 | 15,570 |
| Total other (income) expense, net | 1,688 | 10,605 | (1,110) | (110) |
| Net loss | $ 12,807 | $ 29,609 | $ 6,446 | $ 15,460 |
| Per share information: | | | | |
| Net loss per share of common stock, basic and diluted[1] | $ 3.49 | $ 7.32 | $ 1.64 | $ 3.58 |
| Weighted-average common shares outstanding, basic and diluted[1] | 3,668,072 | 4,043,416 | 3,939,670 | 4,321,267 |
| Pro forma net loss per share of common stock, basic and diluted (unaudited)[2] | | $ 1.73 | | $ 0.59 |
| Pro forma weighted-average shares outstanding, basic and diluted (unaudited)[2] | | 17,111,011 | | 26,288,583 |

(1) See Note 10 to our audited consolidated financial statements and our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus for further details on the calculation of historical net loss per share and the weighted-average number of shares of common stock used in the computation of the per share amounts.
(2) The unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2021 and for the six months ended June 30, 2022 was computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our common stock on the later of January 1, 2021 or the date the shares were issued.

| (in thousands) | As of June 30, 2022 | | |
|---|---|---|---|
| | Actual | Pro Forma(1) | Pro Forma As Adjusted(2) |
| | | (unaudited) | |
| **Consolidated Balance Sheet Data:** | | | |
| Cash and cash equivalents | $112,731 | $ 112,731 | $ 251,721 |
| Working capital(3) | 108,537 | 108,537 | 244,227 |
| Total assets | 114,431 | 114,431 | 252,331 |
| Total convertible preferred stock | 170,184 | — | — |
| Total stockholders' (deficit) equity | (60,557) | 109,627 | 244,227 |

(1) Pro forma amounts give effect to the automatic conversion of all outstanding shares of our convertible preferred stock as of June 30, 2022 into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering.
(2) Pro forma as adjusted amounts reflect pro forma adjustments described in footnote (1) above as well as the sale of 9,000,000 shares of our common stock in this offering, based upon the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase or decrease in the assumed initial public offering price of $17.00 per share would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash and cash equivalents, working capital, total assets and total stockholders' equity by $8.4 million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. Similarly, each increase or decrease of 1.0 million in the number of shares offered by us in this offering would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash and cash equivalents, working capital, total assets and total stockholders' equity by $15.8 million, assuming the assumed initial offering price remains the same and after deducting the estimated underwriting discounts and commissions.
(3) We define working capital as current assets less current liabilities. See our audited consolidated financial statements and our unaudited interim condensed consolidated financial statements and the related notes thereto 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 making your decision to invest in shares of our common stock, you should carefully consider the risks described below, together with the other information contained in this prospectus, including in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in our consolidated financial statements and the related notes included elsewhere in this prospectus. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, financial condition, results of operations and prospects. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.*

### Risks Related to Our Financial Position, Limited Operating History and Need for Additional Capital

***We have a limited operating history, have not completed any clinical trials beyond Phase 1, and none of THB001 or any future product candidates have been approved for commercial sale. We have a history of significant net losses since our inception and expect to continue to incur significant losses for the foreseeable future.***

We are a clinical-stage biopharmaceutical company with a limited operating history on which to base your investment decision. We commenced operations in 2019, and none of THB001 or any future product candidates have completed clinical trials beyond Phase 1 or have been approved for commercial sale. Biopharmaceutical product development is a highly speculative undertaking because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval or become commercially viable.

Since our inception, we have focused substantially all of our efforts and financial resources on the development of our lead product candidate, THB001. We have not yet demonstrated an ability to successfully complete any late-stage trials, obtain marketing approvals, manufacture a commercial-scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. As a result, it may be more difficult for you to accurately evaluate the performance of our business to date or to predict our viability than it would be if we had a longer operating history.

We have incurred significant net losses in each reporting period since our inception, have not generated any revenue to date and have financed our operations principally through private placements of our preferred stock. Our net losses were $12.8 million and $29.6 million for the years ended December 31, 2020 and 2021, respectively, and $6.4 million and $15.5 million for the six months ended June 30, 2021 and 2022, respectively. As of June 30, 2022, we had an accumulated deficit of $63.7 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We expect to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of THB001 and any future product candidates. The net losses we incur may fluctuate significantly from quarter-to-quarter and year-to-year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

We anticipate that our expenses will increase substantially if, and as, we:

- advance THB001 and any future product candidates through clinical development for chronic inducible urticaria, chronic spontaneous urticaria, and asthma;
- conduct additional nonclinical studies and clinical trials for THB001 in additional potential indications;
- discover and develop new product candidates;
- obtain, expand, maintain, defend and enforce our intellectual property portfolio;

- manufacture, or have manufactured, nonclinical, clinical and potentially commercial supplies of THB001 and any future product candidates;
- seek regulatory approvals for THB001 or any future product candidates;
- establish a sales, marketing and distribution infrastructure to commercialize THB001 or any future product candidates, if approved;
- identify additional compounds or product candidates and acquire rights from third parties to those compounds or product candidates through licenses;
- hire additional clinical, scientific and management personnel, as well as administrative staff to support the growth of our business;
- add operational, financial and management information systems and personnel;
- incur additional legal, accounting and other costs associated with operating as a public company following the completion of this offering;
- experience delays related to the COVID-19 pandemic in the United States and in other countries in which we have planned or have active clinical trial sites and where our third-party contract development and manufacturing organizations, or CDMOs operate; and
- establish licenses, collaborations or strategic partnerships.

Even if we succeed in commercializing one or more product candidates, we may continue to incur substantial research and development expenses and other expenditures to develop and market additional product candidates. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business, financial condition, results of operations and prospects. The size of our future losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue, if any. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

***We have never generated revenue, may never generate any revenue from product sales and may never be profitable.***

Our ability to become and remain profitable depends on our ability to generate revenue. We do not expect to generate significant revenue, if any, unless and until we, either alone or with a collaborator, are able to obtain regulatory approval for, and successfully commercialize, THB001, or any other future product candidates we may develop. Successful commercialization will require achievement of many key milestones, including demonstrating safety and efficacy in clinical trials, obtaining regulatory, including marketing, approval for these product candidates, manufacturing, marketing and selling those products for which we, or any future collaborators, may obtain regulatory approval, satisfying any post-marketing requirements and obtaining reimbursement for THB001 or any future product candidates from private insurance or government payors. Because of the uncertainties and risks associated with these activities, we are unable to accurately and precisely predict the timing and amount of revenue, if any, the extent of any further losses or if or when we might achieve profitability. We and any future collaborators may never succeed in these activities and, even if we do, or any future collaborators do, we may never generate revenue in an amount sufficient for us to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Additionally, our expenses could increase if we are required by the U.S. Food and Drug Administration, or the FDA, European Medicines Agency, or EMA, or any comparable foreign regulatory authority to perform clinical trials in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of THB001 or any future product candidates.

Our failure to become and remain profitable would decrease the value of our Company and depress the market price of our common stock and could impair our ability to raise capital, expand our business or continue our operations. If we continue to suffer losses as we have in the past, investors may not receive any return on their investment and may lose their entire investment.

***Even if we complete this offering, we will need substantial additional funds to pursue our business objectives, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development programs, commercialization efforts or other operations.***

Identifying and developing potential product candidates and conducting nonclinical and clinical studies is a time consuming, capital-intensive and uncertain process that takes years to complete. If THB001 or any future product candidates enter and advance through nonclinical studies and clinical trials, as applicable, we will need substantial additional funds to expand or create our development, regulatory, manufacturing, marketing and sales capabilities. We have used substantial amounts of cash since inception to develop THB001 and will require significant funds to conduct further research and development and nonclinical testing and clinical trials of THB001 and any future product candidates, to seek regulatory approvals for THB001 or any future product candidates and to manufacture and market products, if any, which are approved for commercial sale. In addition, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations.

Nonclinical studies and clinical trials for THB001 and any future product candidates, as applicable, will require substantial funds to complete. As of June 30, 2022, we had $112.7 million in cash and cash equivalents. Based on our current operating plan, we believe that our existing cash and cash equivalents, together with the net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditure requirements through 2025. However, our future capital requirements and the period for which we expect our existing resources to support our operations, fund continued growth of our operations, research and development of product candidates, or otherwise respond to competitive pressures, may vary significantly from what we expect and we may need to seek additional funds sooner than planned. 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. Our monthly spending levels vary based on new and ongoing research and development and other corporate activities. Because the length of time and activities associated with successful research and development of THB001 or any future product candidates is highly uncertain, we are unable to estimate the actual funds we will require for development and any marketing and commercialization activities for approved products. Our future funding requirements for THB001, any future product candidates and our ongoing operations, both near and long-term, will depend on many factors, including, but not limited to:

- the timing, cost and progress of nonclinical and clinical development activities;
- the cost of regulatory submissions and timing of regulatory approvals;
- the number and scope of nonclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we may in the future enter into collaborations and/or research and development agreements;
- the timing and amount of milestone and other payments we are obligated to make under our Novartis Agreement or any future license agreements;
- the cash requirements of any future acquisitions or discovery of product candidates;

- our ability to establish and maintain collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties on favorable terms, if at all;
- our ability to achieve sufficient market acceptance, adequate coverage and reimbursement from third-party payors and adequate market share and revenue for any approved product candidates;
- the costs involved in prosecuting and enforcing patent and other intellectual property claims;
- the costs of manufacturing product candidates by third parties;
- the cost of commercialization activities if THB001 or any future product candidates are approved for sale, including marketing, sales and distribution costs;
- our efforts to enhance operational systems and hire additional personnel, including personnel to support development of product candidates;
- the continued effect of the COVID-19 pandemic on our business; and
- our need to implement additional internal systems and infrastructure, including financial and reporting systems to satisfy our obligations as a public company.

If we are unable to obtain funding on a timely basis or on acceptable terms, we may have to delay, reduce or terminate our research and development programs and nonclinical studies or clinical trials, limit strategic opportunities or undergo reductions in our workforce or other corporate restructuring activities. We do not expect to realize revenue from sales of commercial products or royalties from licensed products in the foreseeable future, if at all, and, in no event, before THB001 and any future product candidates are clinically tested, approved for commercialization and successfully marketed, if ever.

We will be required to seek additional funding in the future and currently intend to do so through public or private equity offerings or debt financings, credit or loan facilities, additional licensing agreements and/or collaborations, or a combination of one or more of these funding sources. If we raise additional funds by issuing equity securities, our stockholders will suffer dilution and the terms of any financing may adversely affect the rights of our stockholders. 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. Our future debt financings, if available, are likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities receive any distribution of our corporate assets. If we raise additional funds through licensing or collaboration arrangements with third parties, we may have to relinquish valuable rights to THB001 or any future product candidates, or grant licenses on terms that are not favorable to us. We also could be required to seek collaborators for product candidates at an earlier stage than otherwise would be desirable or relinquish our rights to product candidates or technologies that we otherwise would seek to develop or commercialize ourselves. Failure to obtain capital when needed on acceptable terms, or at all, may force us to delay, limit or terminate our product development and commercialization of our current or future product candidates, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

***We have identified a material weakness in our internal control over financial reporting. If we do not remediate the material weakness in our internal control over financial reporting, or if we fail to establish and maintain effective internal control, we may not be able to accurately report our financial results or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in the market price of our common stock.***

Effective internal control over financial reporting is necessary for us to provide reliable financial reports in a timely manner. In connection with the preparation of our financial statements for the year ended December 31,

2021, we concluded that there was a material weakness in our internal control over financial reporting. A material weakness is a significant deficiency, or a combination of significant deficiencies, in internal control over financial reporting such that it is reasonably possible that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness that we identified related to the lack of segregation of duties, certain system limitations in our accounting software and the overall control environment as we had insufficient internal resources with appropriate accounting and finance knowledge and expertise to design, implement, document and operate effective internal controls around our financial reporting process.

We are implementing measures designed to improve our internal control over financial reporting to remediate this material weakness, including formalizing our processes and internal control documentation and strengthening supervisory reviews by our financial management; hiring additional qualified accounting and finance personnel and engaging financial consultants to enable the implementation of internal control over financial reporting and segregating duties amongst accounting and finance personnel. In addition, we are in the process of implementing an accounting software system with the design and functionality to segregate incompatible accounting duties, which we currently expect will be fully implemented in our 2023 fiscal year.

While we are implementing these measures, we cannot assure you that these efforts will remediate our material weaknesses and significant deficiencies in a timely manner, or at all, or prevent restatements of our financial statements in the future. In particular, we do not currently expect that our material weakness related to our certain system limitations in our accounting software will be fully remediated for the fiscal year ended December 31, 2022 as we expect to implement new software in 2023. If we are unable to successfully remediate our material weaknesses, or identify any future significant deficiencies or material weaknesses, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports, and the market price of our common stock may decline as a result.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. We expect to incur additional costs to remediate these control deficiencies, though there can be no assurance that our efforts will be successful or avoid potential future material weaknesses. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. If we are unable to successfully remediate our existing or any future material weaknesses in our internal control over financial reporting, or if we identify any additional material weaknesses, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting, and our stock price may decline as a result. We also could become subject to investigations by Nasdaq, the Securities and Exchange Commission, or 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. In addition, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis may harm our stock price and make it more difficult for us to effectively market and sell our products to new and existing customers.

**Risks Related to Discovery, Development and Commercialization**

***Our future performance is substantially dependent on the success of our lead product candidate, THB001, which is currently in clinical development and which has not completed a pivotal trial.***

Our future performance is substantially dependent on our ability to timely complete successful clinical trials, obtain regulatory approval for, and then successfully commercialize THB001 and any future product

candidates. We are early in our development efforts and our lead product candidate, THB001, recently completed a Phase 1a clinical trial in healthy volunteers. While we are devoting significant resources to research and development activities, we have not yet identified additional product candidates. We currently have no products that are approved for sale in any jurisdiction. There can be no assurance that THB001 or any future product candidates we develop will achieve success in their clinical trials or obtain regulatory approval.

We plan to seek regulatory approval to commercialize THB001 or any future product candidates in the United States, the European Union and in selected foreign countries, including the United Kingdom and Japan. In order to obtain separate regulatory approvals in other countries, we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy. Other countries also have their own regulations governing, among other things, clinical trials and commercial sales, as well as pricing and distribution of THB001 or any future product candidates, and we will be required to expend significant resources to obtain regulatory approval, which may not be successful, and to comply with ongoing regulations in these jurisdictions.

Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and commercialization of THB001. The success of THB001 will depend on several factors, including the following:

- successful completion of necessary nonclinical studies to enable the initiation of clinical trials;
- acceptance of INDs by the FDA or other similar clinical trial applications from foreign regulatory authorities for our future clinical trials for our pipeline product candidates;
- enrollment of patients in, and the completion of, our clinical trials;
- completion of successful clinical trials with positive risk/benefit profiles;
- receiving required regulatory authorizations for the development and obtaining approvals for the commercialization of THB001 or any future product candidates;
- establishing and maintaining arrangements with third-party manufacturers;
- ability to perform drug manufacturing and maintain consistent supply of drugs which meets specifications across various jurisdictions;
- obtaining and maintaining patent and trade secret protection and non-patent exclusivity for THB001 or any future product candidates and their components and related filings;
- enforcing and defending our intellectual property rights and claims;
- achieving desirable therapeutic properties for THB001 or any future product candidates' intended indications;
- launching commercial sales of THB001 or any future product candidates, if approved, whether alone or in collaboration with third parties;
- acceptance of THB001 or any future product candidates, if approved, by patients, the medical community and third-party payors;
- addressing any delays in our clinical trials resulting from factors related to the COVID-19 pandemic or other major natural disaster or significant political event;
- effectively competing with other therapies; and

- maintaining an acceptable safety profile of THB001 or any future product candidates through clinical trials and following regulatory approval.

Many of these factors are beyond our control, and it is possible that none of THB001 or any future product candidates will ever obtain regulatory approval even if we expend substantial time and resources seeking such 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 THB001 or any future product candidates, which would materially harm our business.

***If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of THB001 or any future product candidates may be delayed and, as a result, our stock price may decline and you may lose all or part of your investment.***

From time to time, we estimate the timing of the anticipated accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones are and will be based on numerous assumptions. The actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control. If we do not meet these milestones as publicly announced, or at all, the commercialization of THB001 or any future product candidates may be delayed or never achieved and, as a result, our stock price may decline. A decline in our stock price and in the value of our Company could cause you to lose all or part of your investment.

***Drug development is a lengthy and expensive process, and the outcome of clinical testing is inherently uncertain, and results of earlier studies and trials may not be predictive of future trial results. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of THB001 or any future product candidates.***

We currently have only one product candidate, THB001, which is in Phase 1 clinical development in Europe and the risk of failure is high. Additionally, we have not submitted an IND for THB001 in the United States for any indication. It is impossible to predict when or if THB001 or any future product candidate will prove effective and safe in humans or will receive regulatory approval. While certain treatments have been approved for chronic spontaneous urticaria, to date no products have been approved specifically for the treatment of chronic inducible urticaria, our first indication. To obtain the requisite regulatory approvals to commercialize any product candidate, we must demonstrate through extensive nonclinical studies and lengthy, complex and expensive clinical trials that our product candidate is safe and effective in humans. Clinical testing can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of nonclinical studies and early clinical trials of THB001 or any future product candidates may not be predictive of the results of later-stage clinical trials. We may be unable to establish clinical endpoints that applicable regulatory authorities would consider clinically meaningful, and a clinical trial can fail at any stage of testing. Differences in trial design between early-stage clinical trials and later-stage clinical trials make it difficult to extrapolate the results of earlier clinical trials to later clinical trials. Moreover, clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in clinical trials have nonetheless failed to obtain marketing approval of their products. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or to unfavorable safety profiles, notwithstanding promising results in earlier trials. There is typically a high rate of failure of product candidates proceeding through clinical trials. Most product candidates that commence clinical trials are never approved as products and there can be no assurance that any of our future clinical trials will ultimately be successful or support clinical development of THB001 or any future product candidates.

We or any future collaborators may experience delays in initiating or completing clinical trials. We or any future collaborators also may experience numerous unforeseen events during, or as a result of, any future clinical

trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize THB001 or any future product candidates, including:

- regulators or institutional review boards, or IRBs, the FDA or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site, or may halt or suspend an ongoing clinical trial;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- clinical trials of any product candidates may fail to show safety or efficacy, produce negative or inconclusive results and we may decide, or regulators may require us, to conduct additional nonclinical studies or clinical trials or we may decide to abandon product development programs;
- the number of subjects required for clinical trials of any product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or subjects may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;
- 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, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;
- we may elect to, or regulators, IRBs, or ethics committees may require that we or our investigators, suspend or terminate clinical research or trials for various reasons, including noncompliance with regulatory requirements or a finding that the participants in our trials are being exposed to unacceptable health risks;
- the cost of clinical trials of any of THB001 or any future product candidates may be greater than we anticipate;
- the quality of THB001 or any future product candidates or other materials necessary to conduct clinical trials of THB001 or any future product candidates may be inadequate to initiate or complete a given clinical trial;
- our inability to manufacture sufficient quantities of THB001 or any future product candidates for use in clinical trials;
- our inability to meet drug specifications suitable for use in clinical trials and commercial applications;
- reports from clinical testing of other therapies may raise safety or efficacy concerns about THB001 or any future product candidates;
- our failure to establish an appropriate safety profile for a product candidate based on clinical or nonclinical data for such product candidate as well as data emerging from other molecules in the same class as THB001 or any future product candidate; and
- the FDA, EMA or other regulatory authorities may require us to submit additional data such as long-term toxicology studies or impose other requirements before permitting us to initiate a clinical trial.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the number and location of clinical sites we enroll, the proximity of

patients to clinical sites, the eligibility and exclusion criteria for the trial, the design of the clinical trial, the inability to obtain and maintain patient consents, the risk that enrolled participants will drop out before completion, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs or therapeutic biologics that may be approved for the indications being investigated by us. Furthermore, we may in the future rely on collaborators, CROs and clinical trial sites to ensure the proper and timely conduct of our future clinical trials, including the patient enrollment process, and we have limited influence over their performance. Additionally, we could encounter delays if treating physicians encounter unresolved ethical issues associated with enrolling patients in future clinical trials of THB001 or any future product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles.

We could also encounter delays if a clinical trial is suspended or terminated by us, the IRBs of the institutions in which such trials are being conducted, or the FDA, EMA or other regulatory authorities, or if a clinical trial is recommended for suspension or termination by the Data Safety Monitoring Board, or the DSMB, for such trial. A suspension or termination may be imposed due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA, EMA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product or treatment, failure to establish or achieve clinically meaningful trial endpoints, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Clinical studies may also be delayed or terminated as a result of ambiguous or negative interim results. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of THB001 or any future product candidates. Further, the FDA, EMA or other regulatory authorities may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after they have reviewed and commented on the design for our clinical trials.

Our product development costs will increase if we experience delays in clinical testing or marketing approvals. We do not know whether any of our clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize THB001 or any future product candidates and may allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize THB001 or any future product candidates and harming our business and results of operations. Any delays in our clinical development programs may harm our business, financial condition, results of operations and prospects significantly.

***Results of nonclinical studies and early clinical trials may not be predictive of results of future clinical trials.***

The outcome of nonclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in earlier development, and we could face similar setbacks. The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval. In addition, nonclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in nonclinical studies and clinical trials have nonetheless failed to obtain marketing approval for the product candidates. Even if we believe that the results of clinical trials for THB001 or any future product candidates warrant marketing approval, the FDA, EMA or comparable foreign regulatory authorities may disagree and may not grant marketing approval of THB001 or any future product candidates.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in

protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial patients. If we fail to receive positive results in clinical trials of THB001 or any future product candidates, the development timeline and regulatory approval and commercialization prospects for such product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

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

From time to time, we may publish preliminary or topline data or data from planned interim analyses of our clinical trials. Preliminary or topline data remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary or topline data that we previously published. Data from planned interim analyses of our 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. As a result, preliminary data and interim analyses should be viewed with caution until the final data are available. Adverse differences between preliminary, topline or interim data and final data could significantly harm our reputation and business prospects.

***Our future clinical trials may reveal significant adverse events not seen in our nonclinical studies and may result in a safety profile that could inhibit regulatory approval or market acceptance of THB001 or any future product candidates.***

If significant adverse events or other side effects are observed in any of our clinical trials, we may have difficulty recruiting patients to our clinical trials, patients may drop out of our trials, or we may be required to abandon the trials or our development efforts of one or more product candidates altogether. For example, KIT inhibition is known to produce certain on-target side effects, including inhibition of spermatogenesis, effects on hematopoietic progenitor cells resulting in reductions in neutrophils, reticulocytes, red blood cells and white blood cells, changes in taste and reduced hair pigmentation. In our Phase 1a trial in healthy volunteers, one moderate adverse effect, or AE, determined to be likely related to THB001 was low neutrophil levels, which resolved after discontinuation in the trial. While we believe that such side effects will be reversible following discontinuation of THB001 with sufficient recovery periods, we will need to monitor the severity and duration of side effects in our clinical trials. If such effects are more severe, less reversible than we expect or not reversible at all, we may decide or be required to perform additional nonclinical studies or to halt or delay further clinical development of THB001, which could result in the delay or denial of regulatory approval by the FDA or other regulatory authorities. We also expect that, similar to other approved KIT inhibitor drugs, THB001 will be teratogenic as KIT mutations are embryo lethal and, if approved, THB001 will require the concomitant use of appropriate birth control measures. We have not yet tested THB001 on non-vasectomized male subjects in multiple doses, so we have not yet been able to evaluate the effect on spermatogenesis. AEs and serious adverse events, or SAEs, that emerge during clinical investigation of or treatment with THB001 or any future product candidates or other compounds acting through similar biological pathways may be deemed to be related to THB001 or any future product candidate. This may require longer and more extensive Phase 3 clinical development, or regulatory authorities may increase the amount of data and information required to approve, market, or maintain THB001 or any future product candidates and could result in warnings and precautions in our product labeling or a restrictive risk evaluation and mitigation strategy, or REMS. This may also result in an inability to obtain approval of THB001 or any future product candidates. We, the FDA, EMA or other applicable regulatory authorities, or an IRB may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects or patients in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects, including the potential

effects on fertility, may inhibit market acceptance of the approved product due to its tolerability versus other therapies. Any of these developments could materially harm our business, financial condition, results of operations and prospects.

***Clinical trials of THB001 or any future our product candidates may not uncover all possible AEs that patients may experience.***

Clinical trials are conducted in representative samples of healthy volunteers and the potential patient population, which may have significant variability. By design, clinical trials are based on a limited number of subjects and are of limited duration of exposure to the product, to determine whether the product candidate demonstrates the substantial evidence of efficacy and safety necessary to obtain regulatory approval. As with the results of any statistical sampling, we cannot be sure that all side effects of THB001 or any future product candidates may be uncovered. It may be the case that only with a significantly larger number of patients exposed to the product candidate for a longer duration may a more complete safety profile be identified. Further, even larger clinical trials may not identify rare SAEs, and the duration of such studies may not be sufficient to identify when those events may occur. Other products have been approved by the regulatory authorities for which safety concerns have been uncovered following approval. Such safety concerns have led to labeling changes, restrictions on distribution through use of a REMS, or withdrawal of products from the market, and THB001 or any future product candidates may be subject to similar risks.

In our Phase 1a trial in healthy volunteers to date, we have observed no SAEs, three moderate AEs and the remaining AEs categorized as mild. Although to date we have not seen evidence of significant safety concerns in our Phase 1a clinical trial with THB001, patients treated with our products, if approved, may experience previously unreported adverse reactions, and it is possible that the FDA or other regulatory authorities may ask for additional safety data as a condition of, or in connection with, our efforts to obtain approval of THB001 or any future product candidates. If safety problems occur or are identified after THB001 or any future product candidates, if any, reach the market, we may make the decision or be required by regulatory authorities to amend the labeling of our products, recall our products, or even withdraw approval for our products.

***The COVID-19 pandemic could adversely impact our business, including the conduct of our clinical trials.***

The ongoing COVID-19 pandemic could cause significant disruptions that could severely impact our business, including:

- delays or difficulties in screening, enrolling and maintaining patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- inability or unwillingness of subjects to travel to the clinical trial sites;
- delays, difficulties or incompleteness in data collection and analysis and other related activities;
- decreased implementation of protocol required clinical trial activities and quality of source data verification at clinical trial sites;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others;

- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials and our other research and development activities, including because of sickness of employees or their families or mitigation measures such as lock-downs and social distancing;
- delays due to production shortages resulting from any events affecting raw material supply or manufacturing capabilities domestically and abroad;
- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials;
- interruption in global and domestic shipping that may affect the transport of clinical trial materials, such as investigational drug products used in our clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, delays or require us to discontinue the clinical trials altogether;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- refusal of regulatory authorities such as FDA or EMA, to accept data from clinical trials in affected geographies; and
- adverse impacts on global economic conditions which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed.

Such disruptions could impede, delay, limit or prevent completion of our ongoing clinical trials and nonclinical studies or commencement of new clinical trials and ultimately lead to the delay or denial of regulatory approval of THB001 or any future product candidates, which would increase our costs and expenses and seriously harm our business, financial condition, results of operations and prospects. Furthermore, if either we or any third party in the supply chain for materials used in the production of THB001 are adversely impacted by restrictions resulting from the COVID-19 pandemic, our supply chain may be disrupted, limiting our ability to manufacture product candidates for our clinical trials. We are in close contact with our clinical research organizations, or CROs, our CDMOs and clinical sites as we seek to mitigate the impact of the COVID-19 pandemic on our current timelines. Measures we have taken in response to the COVID-19 pandemic include, where feasible, conducting remote clinical trial site activations and data monitoring. However, despite these efforts, we have experienced delays in trial site initiations, patient participation and patient enrollment in our clinical trial and we may continue to experience some delays in our clinical trials and nonclinical studies and delays in data collection and analysis.

These delays so far have had a limited impact on our development prospects for THB001, but the negative impacts could be exacerbated as the COVID-19 pandemic and the response to it continue to evolve. The COVID-19 pandemic could also affect the business of the FDA, EMA or other health authorities, which could result in delays in meetings related to planned or completed clinical trials and ultimately of reviews and approvals of THB001. The extent to which the COVID-19 pandemic impacts our business and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the success of mass vaccination efforts globally, travel restrictions and social distancing in the United States and other countries, the impact of new COVID-19 variants, business closures or business disruptions and the effectiveness of actions taken by governmental authorities to contain and address the challenges posed by the ongoing COVID-19 pandemic.

***If we experience delays or difficulties in enrolling patients in our ongoing or planned clinical trials, our receipt of necessary regulatory approval could be delayed or prevented.***

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the number and location of clinical sites we enroll, the proximity of patients to clinical sites, the eligibility and exclusion criteria for the trial, the design of the clinical trial, the inability to obtain and maintain patient consents, the risk that enrolled participants will drop out before completion, competing clinical trials, and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs or therapeutic biologics that may be approved for the indications being investigated by us. In addition, some of our competitors currently have ongoing clinical trials for product candidates that would treat the same patients as THB001, our lead clinical product candidate, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates. The COVID-19 pandemic may also delay clinical trials if there are inadequate clinical resources for sites to safely conduct clinical research. Furthermore, we expect to rely on our collaborators, CROs, and clinical trial sites to ensure the proper and timely conduct of our future clinical trials, including the patient enrollment process, and we have limited influence over their performance. Additionally, we could encounter delays if treating physicians encounter unresolved ethical issues associated with enrolling patients in future clinical trials of THB001 or any future product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles.

If we are unable to enroll a sufficient number of patients for our clinical trials, it would result in significant delays or might require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for THB001 or any future product candidates, slow down or halt our product candidate development and approval process and jeopardize our ability to seek and obtain the marketing approval required to commence product sales and to generate revenue, which would cause the value of our Company to decline and limit our ability to obtain additional financing if needed.

***We face competition from entities that have made substantial investments into the rapid development of novel treatments for allergic and inflammatory diseases, including large and specialty pharmaceutical and biotechnology companies developing novel treatments and technology platforms. If these companies develop technologies or product candidates more rapidly than we do or their technologies are more effective, our ability to develop and successfully commercialize, if approved, product candidates may be adversely affected.***

The development and commercialization of drugs is highly competitive. Our lead product candidate, THB001, if approved, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. Most of our competitors have significantly greater resources than we do and we may not be able to successfully compete. We face substantial competition from multiple sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions and governmental agencies and public and private research institutions. Our competitors compete with us on the level of the technologies employed, or on the level of development of product candidates. In addition, many small biotechnology companies have formed collaborations with large, established companies to (i) obtain support for their research, development and commercialization of products or (ii) combine several treatment approaches to develop longer lasting or more efficacious treatments that may potentially directly compete with our current or future product candidates. We anticipate that we will continue to face increasing competition as new therapies and combinations thereof, technologies, and data emerge within the field of immunology and, furthermore, within the treatment of allergies and inflammatory conditions.

Our likelihood of success will depend partially on our ability to develop and commercialize therapeutics that are safer and more effective than competing products. Our commercial opportunity and likelihood of success will be reduced or eliminated if competing products are safer, more effective, or less expensive than the therapeutics we are trying, or may try, to develop.

Our competitors have developed, are developing or will develop product candidates and processes competitive with our lead product candidate, and any future product candidates, and processes. therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments, including those based on novel technology platforms that enter the market. THB001, our lead product candidate, initially under development for treatment of chronic inducible urticaria, if approved, would face competition from existing approved urticaria treatments. In addition to the current standard of care treatments for patients with allergies and inflammatory diseases, numerous commercial and academic nonclinical studies and clinical trials are being undertaken by a large number of parties to assess novel technologies and product candidates. There are numerous other competitive approaches, including inhibitors of activators of mast cells such as IgE antibodies like omalizumab, inhibitors of mediators such as anti-histamines and anti-IL-4 /IL-13 therapies, other small molecule approaches such as Bruton's tyrosine kinase inhibitors, and other small molecule and biologic KIT inhibitors such as Celldex's CDX-0159 or monoclonal antibody KIT inhibitor, among others.

Many of these competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we have. If we obtain regulatory approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of THB001 or any future product candidates, the ease with which THB001 or any future product candidates can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing THB001 or any future product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and our ability to execute our business plan.

***THB001 or any future product candidates may not achieve adequate market acceptance among physicians, patients, healthcare third-party payors and others in the medical community necessary for commercial success, if approved, and we may not generate any future revenue from the sale or licensing of product candidates.***

Even if regulatory approval is obtained for a product candidate, we may not generate or sustain revenue from sales of the product due to factors such as whether the product can be sold at a competitive cost and whether it will otherwise be accepted in the market. Market participants with significant influence over acceptance of new treatments, such as physicians and third-party payors, may not adopt THB001 or any future product candidates, and we may not be able to convince the medical community and third-party payors to accept and use, or to provide favorable reimbursement for, any product candidates developed by us or future collaborators. Market acceptance of THB001 or any future product candidates, if approved, will depend on, among other factors:

- the timing of our receipt of any marketing and commercialization approvals;
- the terms of any approvals and the countries in which approvals are obtained;
- the safety and efficacy of THB001 or any future product candidates as demonstrated in clinical trials;
- the prevalence and severity of any adverse side effects associated with THB001 or any future product candidates;
- limitations or warnings contained in any labeling approved by the FDA, EMA or other regulatory authority;
- relative convenience and ease of administration of THB001 or any future product candidates;

- the willingness of patients to accept any new methods of administration;
- unfavorable publicity relating to our current product candidates or any future product candidates;
- the success of our physician education programs;
- the effectiveness of sales and marketing efforts;
- the availability of coverage and adequate reimbursement from government and third-party payors;
- the pricing of THB001 or any future product candidates, particularly as compared to alternative treatments; and
- the availability of alternative effective treatments for the disease indications THB001 or any future product candidates are intended to treat and the relative risks, benefits and costs of those treatments.

Sales of medical products also depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that our product, if approved, is safe, therapeutically effective and cost effective as compared with competing treatments. If any product candidate is approved but does not achieve an adequate level of acceptance by such parties, we may not generate or derive sufficient revenue from that product candidate and may not become or remain profitable.

***The market opportunities for THB001 or any of our future product candidates, if approved, may be limited to certain smaller patient subsets and may be smaller than we estimate them to be.***

Our projections of both the number of people who have chronic urticaria as well as other mast cell-mediated allergic and inflammatory diseases we are targeting, and who have the potential to benefit from treatment with THB001 or any of our future product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of the indications that we are targeting. The potentially addressable patient population for THB001 or any of our future product candidates may be more limited that we currently estimate or may not be amenable to treatment with such product candidates. For example, women are nearly twice as likely as men to experience urticaria, and the expected requirement of concomitant use of appropriate birth control measures may result in a lower addressable patient population than we expect. Consequently, even if THB001 or any of our future product candidates are approved, the number of patients that may be eligible for treatment, or willing to be treated, with THB001 or any future product candidates may turn out to be much lower than expected. Even if we obtain significant market share for THB001 or any future product candidates, if approved, if the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications.

***If in the future we are unable to establish U.S. or global sales and marketing capabilities or enter into agreements with third parties to sell and market THB001 or any future our product candidates, we may not be successful in commercializing our product candidates if they are approved and we may not be able to generate any revenue.***

We currently do not have a marketing or sales team for the marketing, sales and distribution of THB001 or any future product candidates, if any of them ever obtain regulatory approval. To commercialize any product

candidates after approval, we must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or arrange with third parties to perform these services, and we may not be successful in doing so. If THB001 or any future product candidates receive regulatory approval, we may decide to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize THB001 or any future product candidates, which will be expensive and time consuming and will require significant attention of our executive officers to manage. For example, some state and local jurisdictions have licensing and continuing education requirements for pharmaceutical sales representatives, which requires time and financial resources. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of any of THB001 or any future product candidates if we obtain approval to market.

With respect to the commercialization of all or certain of THB001 or any future product candidates, if approved, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment any future sales force and distribution systems of our own or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements when needed on acceptable terms, or at all, we may not be able to successfully commercialize any of THB001 or any future product candidates if any receive regulatory approval or any such commercialization may experience delays or limitations. If we are not successful in commercializing THB001 or any future product candidates, if approved, either on our own or through collaborations with one or more third parties, any future product revenue will suffer and we may incur significant additional losses.

***If any of THB001 or any future our product candidates receives marketing approval and we or others later identify undesirable side effects caused by the product candidate, our ability to market and derive revenue from the product candidates could be compromised.***

Undesirable side effects caused by THB001 or any future product candidates could cause regulatory authorities to interrupt, delay or halt clinical trials and could result in more restrictive labeling or the delay or denial of regulatory approval by the FDA, EMA, or other regulatory authorities. Results of future clinical trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, our future clinical trials could be suspended or terminated and the FDA, EMA, or comparable foreign regulatory authorities could order us to cease further development of or deny approval of THB001 or any future product candidates for any or all targeted indications. Such side effects could also affect patient recruitment or the ability of enrolled patients to initiate or complete the clinical trial or result in potential product liability claims. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects.

Further, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients and limited duration of exposure, rare and severe side effects of THB001 or any future product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate.

In the event that any of THB001 or any future product candidates receive regulatory approval and we or others identify undesirable side effects caused by such product, any of the following adverse events could occur:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we may be required to recall the product or change the way the product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;

- regulatory authorities may require the addition of labeling statements, such as a boxed warning or a contraindication;
- we may be required to create a Medication Guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

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

**Risks Related to Our Business and Operations**

***We expect to significantly expand our development, clinical and regulatory capabilities and operations as we grow our Company, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.***

As of June 30, 2022, we had 16 full-time employees. We expect to increase the number of our employees and the scope of our operations, particularly in the areas of clinical development, clinical operations, manufacturing, late-stage regulatory affairs, finance, accounting, business operations, public company compliance, communications and other corporate development functions, and, if THB001 or any of our future product candidates receive regulatory and marketing approval, sales, marketing and distribution capabilities. If we acquire additional product candidates or enter into future collaborations, we may have to further expand our employee base beyond our current projections, which may include further nonclinical research and development or later-stage regulatory operations. 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 and with developing sales, marketing and distribution infrastructure, 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 business development resources.

Further, we currently rely, and for the foreseeable future will continue to rely, in substantial part on certain third-party contract organizations, advisors and consultants to provide certain services, including assuming substantial responsibilities for the conduct of our clinical trials and the manufacturing of THB001 or any future product candidates. We cannot assure you that the services of such third-party contract organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by our third-party contract organizations, advisors or consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain marketing approval of THB001 or any future product candidates or otherwise advance our business. We cannot assure you that we will be able to properly manage our existing third-party contract organizations, advisors or consultants or find other competent outside third-party contract organizations, advisors and consultants on economically reasonable terms, or at all.

If we are not able to effectively manage growth and expand our Company, we may not be able to successfully implement the tasks necessary to further develop and commercialize, if approved, THB001 or any future product candidates and, accordingly, we may not achieve our research, development and commercialization goals.

***Our future performance depends on our ability to retain key employees and to attract, retain and motivate qualified personnel and manage our human capital.***

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries largely depends upon our ability to attract, motivate and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on the development and management expertise of our executive officer team. We currently do not maintain key person insurance on these individuals. The loss of one or more members of our management team or other key employees or advisors could delay our research and development programs and have a material and adverse effect on our business, financial condition, results of operations and prospects. The relationships that our key managers have cultivated within our industry make us particularly dependent upon their continued employment with us. We are dependent on the continued service of our technical personnel, because of the highly technical nature of THB001 or any future product candidates and technologies, and the specialized nature of the regulatory approval process. Because our management team and key employees are not obligated to provide us with continued service, they could terminate their employment with us at any time without penalty.

We primarily conduct our operations at our facility in Cambridge, Massachusetts. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our market, and nationally, is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. We also face competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations. Our future performance will depend in large part on our continued ability to attract and retain highly qualified scientific, technical and management personnel, as well as personnel with expertise in clinical testing, manufacturing, governmental regulation and commercialization. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover and develop product candidates will be limited, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

Our future growth may depend, in part, on our ability to develop and commercialize THB001, if approved, and any future product candidates in foreign markets for which we may rely on collaboration with third parties. We are not permitted to market or promote THB001 or any future product candidates before we receive regulatory approval from the applicable regulatory authority in that foreign market and may never receive such regulatory approval for THB001 or any future product candidates. To obtain separate regulatory approval in many other countries, we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of THB001 or any future product candidates, and we cannot predict success in these jurisdictions. If we fail to comply with the regulatory requirements in international markets and receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of THB001 or any future product candidates will be harmed and our business will be adversely affected. We may not obtain foreign regulatory approvals on a timely basis, if at all. Our failure to obtain approval of any of THB001 or any future product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and our business, financial condition, results of operations and prospects could be materially and adversely affected. Moreover, even if we obtain approval of THB001 or any future product candidates and ultimately commercialize THB001 or any future product candidates in foreign markets, we would be subject to the risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and reduced protection of intellectual property rights in some foreign countries.

***Our business depends on the efficient and uninterrupted operation of our information technology systems and those of our third-party CROs, CDMOs, or other vendors, contractors or consultants, may fail or suffer security breaches, cyber-attacks, loss or leakage of data and other disruptions, which could result in a material disruption of our development programs, compromise sensitive information related to our business or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.***

Our business success depends on the security and efficient and uninterrupted operation of our information technology systems and we may be unable to adequately protect our information technology systems from cyber- attacks, which could result in the disclosure of confidential information, damage our reputation, and subject us to significant financial and legal exposure. We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit confidential information (including but not limited to intellectual property, proprietary business information and sensitive personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party CROs, CDMOs, vendors and other contractors and consultants who have access to our confidential information. System failures or outages, including any potential disruptions due to significantly increased global demand on certain cloud-based systems during the remote work environment resulting from the COVID-19 pandemic, could compromise our ability to perform these functions in a timely manner, which could harm our ability to conduct business or delay our financial reporting.

Despite the implementation of security measures, given their size and complexity and the increasing amounts of confidential information that they maintain, our internal information technology systems and those of our third-party CROs, CDMOs, vendors and other contractors and consultants are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, accidents by our employees or third party service providers, natural disasters, terrorism, war, global pandemics, and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, third-party CROs, CDMOs, vendors, contractors, consultants, business partners and/or other third parties, or from cyber-attacks or supply chain attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure, or that of our third-party CROs, CDMOs, vendors and other contractors and consultants, or lead to data leakage. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity, and sophistication of attempted attacks and intrusions from around the world have increased. The COVID-19 pandemic is generally increasing the attack surface available for exploitation, as more companies and individuals work online and remotely, and as such, the risk of a cybersecurity incident occurring, and our investment in risk mitigations against such an incident, are increasing. For example, there has been an increase in phishing and spam email attacks as well as social engineering attempts from “hackers” hoping to use the recent COVID-19 pandemic to their advantage. We may not be able to anticipate all types of security threats, nor implement preventive measures effective against all such security threats. The techniques used by cyber criminals change frequently, may not be recognized until launched and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. Any breach, loss or compromise of clinical trial participant personal data may also subject us to civil fines and penalties, including under the Health Insurance Portability and Accountability Act, or HIPAA, and other relevant state and federal privacy laws in the United States. If the information technology systems of our third-party CROs, CDMOs, vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring.

While we have not experienced any such system failure, accident or security breach to date, we cannot assure you that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems, or those of our third-party CROs, CDMOs, vendors and other contractors and consultants, or other cyber incidents that could have a material adverse effect upon our reputation, business, operations, or financial condition. For example, if such an event were to occur and cause interruptions in our operations, or those of our third-party CROs, CDMOs, vendors and other contractors and consultants, it could result in a material disruption of our programs and the development of our lead product candidate could be delayed. In addition, the loss of clinical trial data for THB001 or any other future product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Furthermore, significant disruptions of our internal information technology systems or those of our third-party CROs, CDMOs, vendors and other contractors and consultants, or security breaches could result in the loss, misappropriation and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information and sensitive personal information), which could result in financial, legal, business and reputational harm to us.

A security breach could lead to claims by our counterparties that we have failed to comply with such legal or contractual obligations. As a result, we could be subject to legal action or our counterparties could end their relationships with us. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages.

In addition, litigation resulting from security breaches may adversely affect our business. Unauthorized access to our platform, systems, networks, or physical facilities could result in litigation with our counterparties. These proceedings could force us to spend money in defense or settlement, divert management's time and attention, increase our costs of doing business, or adversely affect our reputation. We could be required to fundamentally change our business activities and practices or modify our solutions and/or platform capabilities in response to such litigation, which could have an adverse effect on our business. If a security breach were to occur and the confidentiality, integrity or availability of our data or the data of our partners, patients or our counterparties was disrupted, we could incur significant liability, or our platform, systems or networks may be perceived as less desirable, which could negatively affect our business and damage our reputation.

We may not have adequate insurance coverage with respect to security breaches or disruptions. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

***Our business entails a significant risk of product liability and our ability to obtain sufficient insurance coverage could have a material and adverse effect on our business, financial condition, results of operations and prospects.***

When we conduct clinical trials of our product candidates, we may be exposed to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, if approved, such claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, termination of clinical trial sites or entire trial programs, withdrawal of clinical trial participants, injury to our reputation and significant negative media attention, significant costs to defend the related litigation, a diversion of management's time and our resources from our

business operations, substantial monetary awards to trial participants or patients, loss of revenue, the inability to commercialize any products that we may develop, and a decline in our stock price. We currently maintain general liability insurance. We may, however, need to obtain higher levels of product liability insurance for later stages of clinical development or marketing any of our product candidates. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

We are exposed to the risk of employee fraud or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to comply with FDA regulations, provide true, complete and accurate information to the FDA, EMA and other similar foreign regulatory bodies, comply with manufacturing standards we may establish, comply with healthcare fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. If we obtain FDA approval of THB001 or any future product candidates and begin commercializing those products in the United States, our potential exposure under these laws will increase significantly, and our costs associated with compliance with these laws will likely increase. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a material and adverse effect on our business, financial condition, results of operations and prospects, including the imposition of significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, the curtailment or restructuring of our operations, loss of eligibility to obtain approvals from the FDA, EMA, or other foreign regulatory body exclusion from participation in government contracting, healthcare reimbursement or other government programs, including Medicare and Medicaid, integrity oversight and reporting obligations, or reputational harm.

***If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be affected adversely.***

Our research and development activities involve the use of hazardous chemicals and materials, including radioactive materials. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous chemicals and materials. We believe our procedures for storing, handling and disposing these materials in our facilities comply with the relevant guidelines of Middlesex County, Massachusetts. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of animals and biohazardous materials. 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 these materials, this insurance may not provide adequate coverage against potential liabilities. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

***We or the third parties on whom we depend may be adversely affected by natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.***

Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemic, power shortage, telecommunication failure or other natural or manmade accidents or incidents that result in us being unable to fully utilize our facilities, or the manufacturing facilities of our CDMOs, may have a material and adverse effect on our ability to operate our business, particularly on a daily basis, and have significant negative consequences on our financial and operating conditions. Extreme weather conditions or other natural disasters could further disrupt our operations and have a material and adverse effect on our business, financial condition, results of operations and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our research facilities or the manufacturing facilities of our CDMOs, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time, if at all.

Our employees often conduct business outside of any facilities leased by us. These locations may be subject to additional security and other risk factors due to the limited control of our employees. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure you that the amounts of insurance will be sufficient to satisfy any damages and losses. If our facilities, or the manufacturing facilities of our CDMOs, are unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our research and development programs may be harmed. Any business interruption could have a material and adverse effect on our business, financial condition, results of operations and prospects.

***Changes in tax laws or regulations that are applied adversely to us may have a material adverse effect on our business, cash flow, financial condition or results of operations.***

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our business operations and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the Tax Cuts and Jobs Act, enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to the Tax Cuts and Jobs Act may affect us, and certain aspects of the Tax Cuts and Jobs Act could be repealed or modified under proposed legislation. In addition, it is uncertain if and to what extent various states will conform to the Tax Cuts and Jobs Act, the CARES Act, or any other newly enacted federal tax legislation. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under the Tax Cuts and Jobs Act, the CARES Act or future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges, and could increase our future U.S. tax expense.

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

We have incurred substantial losses during our history and do not expect to become profitable in the near future, and we may never achieve profitability. Under the Tax Cuts and Jobs Act, as modified by the CARES

Act, unused U.S. federal net operating losses generated in tax years beginning after December 31, 2017, will not expire and may be carried forward indefinitely but the deductibility of such federal net operating losses for any year is limited to no more than 80% of the excess, if any, of current year taxable income (without regard to certain deductions) over the amount of federal net operating losses generated in tax years beginning before January 1, 2018 that are deducted in the current year. It is uncertain if and to what extent various states will conform to the Tax Cuts and Jobs Act or the CARES Act. In addition, both our current and our future unused losses and other tax attributes may be subject to limitation under Sections 382 and 383 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, if we undergo, or have undergone, an "ownership change," generally defined as a greater than 50 percentage point change (by value) in our equity ownership by certain stockholders over a three-year period. We have not completed a Section 382 study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since our formation due to the complexity and cost associated with such a study and the fact that there may be additional ownership changes in the future. As a result, if we undergo an ownership change, our ability to use all of our pre-change net operating loss carryforwards and other pre-change tax attributes (such as research tax credits) to offset our post-change income or taxes may be limited. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of net operating losses is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, even if we attain profitability, we may be unable to use all or a material portion of our net operating losses and other tax attributes, which could adversely affect our future cash flows.

**Risks Related to Our Reliance on Third Parties**

***We rely, and intend to continue to rely, on third parties to conduct our clinical trials and perform all of our research and nonclinical studies. If these third parties do not satisfactorily carry out their contractual duties, fail to comply with applicable regulatory requirements or do not meet expected deadlines, our development programs may be delayed or subject to increased costs or we may be unable to obtain regulatory approval, each of which may have an adverse effect on our business, financial condition, results of operations and prospects.***

We do not have the ability to independently conduct all aspects of our nonclinical testing or clinical trials ourselves. As a result, we are dependent on third parties to conduct our ongoing and planned nonclinical studies and clinical trials of our future product candidates. The timing of the initiation and completion of these trials will therefore be partially controlled by such third parties and may result in delays to our development programs. Specifically, we expect CROs, clinical investigators and consultants to play a significant role in the conduct of these trials and the subsequent collection and analysis of data. However, these CROs and other third parties are not our employees, and we will not be able to control all aspects of their activities. Nevertheless, we are responsible for ensuring that each clinical trial is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with good clinical practices, or GCP, requirements, which are regulations and guidelines enforced by the FDA for product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, clinical trial investigators and clinical trial sites. If we or any of our CROs or clinical trial sites fail to comply with applicable GCP requirements, the data generated in our clinical trials may be deemed unreliable, and the FDA may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA will determine that our clinical trials comply with GCPs. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure, or the failure of third parties on whom we rely, to comply with these regulations may require us to stop and/or repeat clinical trials, which would delay the marketing approval process.

There is no guarantee that any such CROs, clinical trial investigators or other third parties on which we rely will devote adequate time and resources to our development activities or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory

requirements, otherwise perform in a substandard manner, or terminate their engagements with us, the timelines for our development programs may be extended or delayed or our development activities may be suspended or terminated. If our clinical trial site terminates for any reason, we may experience the loss of follow-up information on subjects enrolled in such clinical trial unless we are able to transfer those subjects to another qualified clinical trial site, which may be difficult or impossible.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting clinical trials or other product development activities that could harm our competitive position. 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 THB001 or any other future product candidates and will not be able to, or may be delayed in our efforts to, commercialize our products, if approved.

***We may, in the future, enter into collaborations with third parties for the discovery, development and commercialization of product candidates, if approved. If those collaborations are not successful, we may not be able to capitalize on the market potential of THB001 and any future product candidates.***

We may seek third-party collaborators for the development and commercialization of THB001 or any future product candidates, if approved, on a select basis, including potentially in specific foreign jurisdictions. We have not entered into any collaborations to date. Our likely collaborators for any future collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. We will face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a future collaboration will depend, among other things, upon our assessment of the future collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of our business.

If we do enter into any such arrangements with any third parties, we will likely have limited control over the amount and timing of resources that our future collaborators dedicate to the development or commercialization of THB001 or any future product candidates. Our ability to generate revenues from these arrangements will depend on our future collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements. Collaborations with future collaborators involving THB001 or any future product candidates would pose numerous risks to us, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations and may not perform their obligations as expected;
- collaborators may de-emphasize or not pursue development and commercialization of THB001 or any future product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus, including as a result of a sale or disposition of a business unit or development function, or available funding or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with THB001 or any future product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;

- a collaborator with marketing and distribution rights to multiple products may not commit sufficient resources to the marketing and distribution of our product, if approved, relative to other products;

- collaborators may not properly obtain, maintain, defend or enforce our intellectual property rights or may use our proprietary information and intellectual property in such a way as to invite litigation or other intellectual property related proceedings that could jeopardize or invalidate our proprietary information and intellectual property or expose us to potential litigation or other intellectual property related proceedings;

- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or, if approved, commercialization of THB001 or any future product candidates or that result in costly litigation or arbitration that diverts management attention and resources;

- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or, if approved, commercialization of the applicable product candidates;

- collaboration agreements may not lead to development or, if approved, commercialization of product candidates in the most efficient manner or at all; and

- if a future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or, if approved, commercialization program could be delayed, diminished or terminated.

If we establish one or more collaborations, all of the risks relating to product development, regulatory approval and, if approved, commercialization described above would also apply to the activities of any such future collaborators.

***We rely on third-party manufacturers and suppliers to supply components of THB001 or any future product candidates. The loss of our third-party manufacturers or suppliers, or our or their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.***

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

The manufacturing process for a product candidate is subject to FDA, EMA and other foreign regulatory authority review. We, and our suppliers and manufacturers, must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as current Good Manufacturing Practices, or cGMPs. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA, EMA and other foreign regulatory authorities. If our contract manufacturers are unable to maintain a compliance status acceptable to the FDA, EMA and other foreign regulatory authorities, THB001 or any future product candidates may not be approved. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or comparable foreign regulatory authorities, we may not be able to rely on their manufacturing facilities for the manufacture of components of THB001 or any future product

candidates. Moreover, although we do not control the manufacturing process at our contract manufacturers and are completely dependent on them for compliance with current regulatory requirements, we are nonetheless responsible for ensuring that THB001 or any future product candidates are manufactured in accordance with applicable laws and regulatory requirements. In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to enter into an agreement with another third party, which we may not be able to do on reasonable terms, if at all. In some cases, the technical skills or technology required to manufacture THB001 or any future product candidates may be unique or proprietary to the original contract manufacturer and we may have difficulty transferring the manufacturing of THB001 or any future product candidates to another third party. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to enable us, or to have another third party, manufacture THB001 or any future product candidates. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines, and we may be required to repeat some of the development program. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

We expect to continue to rely on CDMOs if we receive regulatory approval for any product candidate. To the extent that we have existing, or enter into future, manufacturing arrangements with third parties, we will depend on these third parties to perform their obligations in a timely manner consistent with contractual and regulatory requirements, including those related to quality control and assurance. Any manufacturing facilities used to produce THB001 or any future product candidates will be subject to periodic review and inspection by the FDA, EMA and other foreign regulatory authorities, including for continued compliance with cGMP requirements, quality control, quality assurance and corresponding maintenance of records and documents. If we are unable to obtain or maintain third-party manufacturing for product candidates, or to do so on commercially reasonable terms, we may not be able to develop and commercialize THB001 or any future product candidates, if approves. Our or a third party's failure to execute on our manufacturing requirements, to comply with cGMPs or to maintain a compliance status acceptable to the FDA, EMA or other foreign regulatory authorities could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of product candidates under development;
- delay in submitting regulatory applications, or receiving regulatory approvals, if any, for product candidates;
- loss of the cooperation of future collaborators;
- subjecting third-party manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease distribution or to recall batches of THB001 or any future product candidates; and
- in the event of approval to market and commercialize a product candidate, an inability to meet commercial demands for our products.

Additionally, our contract manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our contract manufacturers were to encounter any of these difficulties, our ability to provide THB001 or any future product candidates to patients in nonclinical and clinical trials, or to provide products for treatment of patients, if approved and commercialized, would be jeopardized.

**Risks Related to Intellectual Property**

***If we are not able to obtain, maintain and enforce patent protection for our technologies or product candidates, development and commercialization, if approved, of THB001 or any future product candidates may be adversely affected.***

Our success depends in part on our ability to obtain and maintain patents and other forms of intellectual property rights, including in-licenses of intellectual property rights of others, for THB001 and any future product candidates, as well as our ability to preserve our trade secrets, to prevent third parties from infringing upon our proprietary rights and to operate without infringing upon the proprietary rights of others. Currently, our intellectual property protection includes patent applications owned by us and patents and patent applications that we have in-licensed from Novartis Pharma AG., or Novartis, under the Novartis License Agreement. We may not be able to apply for patents on certain aspects of THB001 or any future product candidates in a timely fashion or at all. Further, we may not be able to prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

There may be circumstances where we may not have the right to control the preparation, filing and prosecution of all patent applications that we license from third parties, or to maintain and/or enforce the rights to patents licensed from third parties, in which case, we will be dependent on our licensors to obtain, maintain and enforce patent protection for our licensed intellectual property. Our licensors may not successfully prosecute the patent applications that are licensed to us and even if patents are issued in respect of these patent applications, our licensors may fail to maintain these patents or may determine not to pursue litigation against other companies that are infringing these patents. In other words, such licensed patents and patent applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. Further, we cannot be certain that such activities related to the preparation, filing, prosecution, maintenance and/or enforcement of the licensed patent rights by licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patent rights. We may have limited control over the manner in which our licensors initiate an infringement proceeding against a third-party infringer of the licensed patent rights, or defend certain of the licensed patent rights. It is possible that the licensor's infringement proceeding or defense activities with respect to the licensed patent rights may be less vigorous than had we conducted them ourselves. In the event our licensors fail to adequately pursue and maintain patent protection for the licensed patents and patent applications they control, and to timely cede control of such prosecution and/or enforcement to us, our competitors might be able to enter the market, which would have a material adverse effect on our business.

Future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing products and technology. There is no guarantee that any of our pending patent applications will result in issued or granted patents, that any of our future issued or granted patents will not later be found to be invalid or unenforceable or that any future issued or granted patents will include claims that are sufficiently broad to cover THB001 or any future product candidates or to provide meaningful protection from our competitors. Moreover, the patent position of biotechnology and biopharmaceutical companies can be highly uncertain because it involves complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our current and future proprietary technology and product candidates are covered by valid and enforceable patents, or are effectively maintained as trade secrets. If third parties disclose or misappropriate our proprietary rights, it may materially and adversely affect our position in the market.

Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Assuming the other requirements for patentability are met, currently, the first to file a patent application is generally entitled to the patent. However,

prior to March 16, 2013, in the United States, the first to invent was entitled to the patent. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions.

The U.S. Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a large number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case. The standards applied by the USPTO and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and biopharmaceutical patents. As such, we do not know the degree of future protection that we will have on our proprietary products and technology. The process of obtaining patents is time consuming, expensive and sometimes unpredictable.

Once granted, for a given period after allowance or grant patents may remain open to opposition, interference, re-examination, post-grant review, *inter partes* review, nullification, or derivation action in court or before patent offices or similar proceedings, during which time third parties can raise objections against such initial grant. Such proceedings may continue for a protracted period of time and an adverse determination in any such proceedings could reduce the scope of the allowed or granted claims thus attacked, or could result in our patents being invalidated in whole or in part, or being held unenforceable, which could allow third parties to commercialize THB001 or any future product candidates and compete directly with us without payment to us. In addition, there can be no assurance that:

- others will not or may not be able to make, use or sell compounds that are the same as or similar to THB001 or any future product candidates but that are not covered by the claims of the patents that we own or license;
- we or our licensors, or our existing or future collaborators are the first to make the inventions covered by each of our issued patents and pending patent applications that we own or license;
- we or our licensors, or our existing or future collaborators are the first to file patent applications covering certain aspects of our inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- a third party may not challenge our patents and, if challenged, a court would hold that our patents are valid, enforceable and infringed;
- any issued patents that we own or have licensed or that we may license in the future will provide us with any competitive advantages, or will not be challenged by third parties;
- we may develop additional proprietary technologies that are patentable;
- the patents of others will not have a material or adverse effect on our business, financial condition, results of operations and prospects; and
- our competitors do not conduct research and development activities in countries where we do not have enforceable patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.

If we or our licensors fail to maintain the patents and patent applications covering THB001 or any future product candidates, our competitors might be able to enter the market, which could have a material and adverse effect on our business, financial condition, results of operations and prospects. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

***If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.***

In addition to seeking patent protection for certain aspects of THB001 or any future product candidates, we also consider trade secrets, including confidential and unpatented know-how, important to the maintenance of our competitive position. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed. We seek to protect trade secrets and confidential and unpatented know-how, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to maintain confidentiality and assign their inventions to us. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts in the United States and certain foreign jurisdictions are less willing or unwilling to protect trade secrets. 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 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 and adverse effect on our business, financial condition, results of operations and prospects.

***If we breach our license agreements it could have a material adverse effect on our commercialization efforts for THB001 or any future product candidates.***

We are party to a license agreement, the Novartis Agreement, that enable us to utilize third-party intellectual property in the development of our lead product candidate, THB001, and we may in the future enter into more such license agreements with third parties under which we license the use, development and commercialization rights to THB001 or any future product candidates or technology from third parties.

These intellectual property license agreements may require us to comply with various obligations, including diligence obligations such as development and commercialization obligations, as well as potential royalty and milestone payments and other obligations. If we fail to comply with our obligations under any of these license agreements, use the licensed intellectual property in an unauthorized manner, we are subject to bankruptcy-related proceedings or otherwise materially breach any of these license agreements, the terms of the license granted may be materially modified, such as by rendering currently exclusive licenses non-exclusive, or it may give our licensors the right to terminate the applicable license agreement, in whole or in part. Generally, the loss of or termination of our rights under the Novartis Agreement, or any other licenses we may acquire in the future, could harm our business, financial condition, results of operations and prospects.

We may also, in the future, enter into license agreements with third parties under which we are a sublicensee. If our sublicensor fails to comply with its obligations under its upstream license agreement with its licensor, the licensor may have the right to terminate the upstream license, which may result in termination of our sublicense. If this were to occur, we would no longer have rights to the applicable intellectual property unless we are able to secure our own direct license with the owner of the relevant rights, which we may not be able to do on

reasonable terms, or at all, which may impact our ability to continue to develop and commercialize THB001 or any future product candidates incorporating the relevant intellectual property.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. Disputes may arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other intellectual property rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of THB001 or any future product candidates, and what activities satisfy those diligence obligations;
- our right to transfer or assign the license;
- the 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
- whether and the extent to which inventors are able to contest the assignment of their rights to our licensors.

If disputes over intellectual property that we have licensed or license in the future prevent or impair our ability to maintain our current licensing arrangements on acceptable terms or at all, we may be unable to successfully develop and commercialize the affected product candidates, which could have material adverse effect on our business. In addition, if disputes arise as to ownership of licensed intellectual property, our ability to pursue or enforce the licensed patent rights may be jeopardized. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer. Further, certain of our future license agreements with third parties may limit or delay our ability to consummate certain transactions, may impact the value of those transactions or may limit our ability to pursue certain activities (e.g., we may in the future enter into license agreements that are not assignable or transferable, or that require the licensor's express consent in order for an assignment or transfer to take place).

***Our intellectual property licensed from various third parties may be subject to retained rights.***

Licensors often retain certain rights under license agreements, including the right to use the underlying licensed intellectual property for non-commercial academic and research use, to publish general scientific findings from research related to the licensed intellectual property, and to make customary scientific and scholarly disclosures of information relating to the licensed intellectual property. It is difficult to monitor whether licensors limit their use of the licensed intellectual property to these uses, and we could incur substantial expenses to enforce our rights to our licensed intellectual property in the event of misuse.

In addition, the United States federal government retains certain rights in inventions produced with its financial assistance under the Patent and Trademark Law Amendments Act, or the Bayh-Dole Act. The federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" for its own benefit. The Bayh Dole Act also provides federal agencies with "march-in rights." March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a "nonexclusive,

partially exclusive, or exclusive license" to a "responsible applicant or applicants." If the patent owner refuses to do so, the government may grant the license itself. In the future, we may need to collaborate with academic institutions to accelerate our research or development with respect to THB001 or any future product candidates. While we try to avoid engaging our university partners in projects in which there is a risk that federal funds may be commingled, we cannot guarantee that any co-developed intellectual property will be free from government rights pursuant to the Bayh-Dole Act. If, in the future, we co-own or license intellectual property which is critical to our business that is developed in whole or in part with federal funds subject to the Bayh Dole Act, our ability to enforce or otherwise exploit such licensed intellectual property may be adversely affected.

***Our strategy of obtaining rights to key technologies through in-licenses may not be successful.***

We may seek to expand our product candidate pipeline in part by in-licensing the rights to key technologies. The future growth of our business will depend in part on our ability to in-license or otherwise acquire the rights to additional product candidates or technologies. We cannot assure you that we will be able to in-license or acquire the rights to any product candidates or technologies from third parties on acceptable terms or at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

The in-licensing and acquisition of these technologies is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire product candidates or technologies that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash 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. Furthermore, we may be unable to identify suitable product candidates or technologies within our area of focus. If we are unable to successfully obtain rights to suitable product candidates or technologies, our business, financial condition, results of operations and prospects could suffer.

***Other companies or organizations may challenge our or our licensors' patent rights or may assert patent rights that prevent us from developing and commercializing our products.***

Oral KIT inhibitor therapies for the treatment of mast cell-mediated allergic and inflammatory disease are a relatively new scientific field. In addition to patent applications that we own or in-license to KIT inhibitor therapies, there are pending patent applications by others in the United States and in key markets around the world that claim many different methods, compositions and processes relating to the discovery, development and manufacture of small-molecule KIT inhibitor-based and other therapeutics.

As the field of small-molecule KIT inhibitor-based therapeutics continues to mature, patent applications are being processed by national patent offices around the world. There is uncertainty about which patents will issue and, if they do, as to when, to whom, and with what claims. In addition, third parties may attempt to invalidate our intellectual property rights. Even if our rights are not directly challenged, disputes could lead to the weakening of our intellectual property rights. Our defense against any attempt by third parties to circumvent or invalidate our intellectual property rights could be costly to us, could require significant time and attention of our management and could have a material and adverse effect on our business, financial condition, results of operations and prospects or our ability to successfully compete. If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product.

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

Filing, prosecuting, defending and enforcing patents covering our technology in the United States and in other jurisdictions worldwide would be extremely costly, and our or our licensors' or collaborators' intellectual

property rights may not exist in some countries outside the United States or may be less extensive in some countries than in the United States. In jurisdictions where we or our licensors or collaborators have not obtained patent protection, competitors may seek to use our or our licensors' or collaborators' technology to develop competing products and further, may export otherwise infringing products to territories where we have patent protection, but where it is more difficult to enforce a patent as compared to the United States. Competitor products may compete with our future products in jurisdictions where we do not have issued or granted patents or where our or our licensors' or collaborators' issued or granted patent claims or other intellectual property rights are not sufficient to prevent competitor activities in these jurisdictions. The legal systems of certain countries, particularly certain developing countries, make it difficult to enforce patents and such countries may not recognize other types of intellectual property protection, particularly relating to pharmaceuticals or biopharmaceuticals. This could make it difficult for us or our licensors or collaborators to prevent the infringement of our or their patents or marketing of competing products in violation of our or their proprietary rights generally in certain jurisdictions. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our and our licensors' or collaborators' efforts and attention from other aspects of our business, could put our and our licensors' or collaborators' patents at risk of being invalidated or interpreted narrowly and our and our licensors' or collaborators' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors or collaborators. We or our licensors or collaborators may not prevail in any lawsuits that we or our licensors or collaborators initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful.

When we elect to pursue patent protection on an invention, we generally first file a U.S. provisional patent application (a priority filing) at the USPTO. An international patent application under the Patent Cooperation Treaty, or PCT, is then usually filed within twelve months after the priority filing. Based on the PCT filing, national and regional patent applications may be filed in the United States, the European Patent Office and, depending on the individual case, also in any or all of, *inter alia*, Australia, Brazil, Canada, China, Hong Kong, India, Israel, Japan, Mexico, New Zealand, Eurasia, South Africa, South Korea and other jurisdictions. We have thus far not filed for patent protection in all national and regional jurisdictions where such protection may be available. In addition, we may decide to abandon national and regional patent applications before grant. Finally, the grant proceeding of each national or regional patent office is an independent proceeding which may lead to situations in which applications might in some jurisdictions be refused by the relevant registration authorities, while granted by others. It is also quite common that, depending on the country, various scopes of patent protection may be granted on the same product candidate or technology.

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions. If we or our licensors or collaborators encounter difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished and we may face additional competition from others in those jurisdictions. 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 a patent. If we or any of our licensors or collaborators are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position in the relevant jurisdiction may be impaired and our business, financial condition, results of operations and prospects may be adversely affected.

***We, our licensors or collaborators, or any future strategic partners may need to resort to litigation to protect or enforce our patents, if and when granted, or other proprietary rights, all of which could be costly, time consuming, delay or prevent the development and commercialization of THB001 or any future product candidates, or put our patents, if and when granted, and other proprietary rights at risk.***

Competitors may infringe our patents, if and when granted, or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering one of our products or our technology,

the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, lack of adequate written description, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that an individual connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity or unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one or more of our products or certain aspects of our platform technology. Such a loss of patent protection could have a material and adverse effect on our business, financial condition, results of operations and prospects. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the inventorship or priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring THB001 or any future product candidates to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock. Patents and other intellectual property rights will not protect our technology if competitors design around our protected technology without legally infringing our patents or other intellectual property rights.

***Intellectual property rights of third parties could adversely affect our ability to commercialize THB001 or any future product candidates, and we, our licensors or collaborators, or any future strategic partners may become subject to third party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights. We might be required to litigate or obtain licenses from third parties in order to develop or market THB001 or any future product candidates. Such litigation or licenses could be costly or not available on commercially reasonable terms.***

We, our licensors or collaborators, or any future strategic partners, may be subject to third-party claims for infringement or misappropriation of patent or other proprietary rights. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries, including patent infringement lawsuits, interferences, derivations, post-grant reviews, oppositions and *inter partes* review proceedings before the USPTO, and corresponding foreign patent offices. There may be issued patents and pending patent applications that claim aspects of our targets or THB001 or any future product candidates and modifications that we may need to apply to THB001 or any future product candidates. There may be issued patents that claim KIT inhibitors which may be relevant to the products we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we may not be able to market products or perform research and development or other activities covered by these patents, which could have a material and adverse effect on our business, financial condition, results of operations and prospects. If we, our licensors or collaborators, or any future strategic partners are found to infringe a third-party patent or other intellectual property rights, we could be required to pay damages, potentially including treble damages and attorneys' fees if we or they are found to have infringed willfully. In addition, we, our licensors or collaborators, or any future strategic partners may choose to seek, or be required to seek, a license from a third party, which may not be available on acceptable terms, if at all. Even if

a license can be obtained on acceptable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us. If we fail to obtain a required license, we or our existing or future collaborators may be unable to effectively market product candidates based on our technology, which could limit our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. In addition, we may find it necessary to pursue claims or initiate lawsuits to protect or enforce our patent or other intellectual property rights. The cost to us in defending or initiating any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in our favor, could be substantial, and litigation could divert our management's attention. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and limit our ability to continue our operations.

Our competitive position may suffer if patents issued to third parties or other third-party intellectual property rights cover our products or product candidates or elements thereof, or our manufacture or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize products or product candidates until such patents expire or unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property right concerned, or enter into a license agreement with the intellectual property right holder, if available on commercially reasonable terms. There may be issued patents of which we are not aware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by THB001 or any future product candidates. There also may be pending patent applications of which we are not aware that may result in issued patents, which could be alleged to be infringed by THB001 or any future product candidates. If such an infringement claim should be brought and be successful, we may be required to pay substantial damages, including potentially treble damages and attorneys' fees for willful infringement, and we may be forced to abandon THB001 or any future product candidates or seek a license from any patent holders. No assurances can be given that a license will be available on commercially reasonable terms, if at all.

It is also possible that we have failed to identify relevant third-party patents or applications. For example, in certain situations, a U.S. patent application can remain confidential until the patent application issues as a U.S. patent. International patent applications and parallel patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products could have been filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our products or the use of our products. Third-party intellectual property right holders may also actively bring infringement claims against us. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our products. Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of THB001 or any future product candidates that are held to be infringing. We might, if possible, also be forced to redesign product candidates so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business and could have a material and adverse effect on our business, financial condition, results of operations and prospects.

***Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.***

Litigation and other legal proceedings relating to intellectual property claims, with or without merit, are unpredictable and generally expensive and time consuming and are likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. 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. 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, such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

***We may be subject to claims that we or our employees or consultants have wrongfully used or disclosed alleged trade secrets of our employees' or consultants' former employers or their clients. These claims may be costly to defend and if we do not successfully do so, we may be required to pay monetary damages and may lose valuable intellectual property rights or personnel.***

Many of our employees, including our management, were previously employed at biotechnology or biopharmaceutical companies, including our competitors or potential competitors. Some of these employees executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper our ability to develop and ultimately commercialize, or prevent us from developing and commercializing, THB001 or any future product candidates, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

***Patent terms may be insufficient to protect our competitive position on THB001 or any future product candidates for an adequate amount of time.***

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various patent term adjustments or extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering THB001 or any future product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and/or rely on our outside counsel to pay these fees due to the USPTO and non-U.S. governmental patent agencies. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

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

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop and our technology, our U.S. patent or one or more U.S. patents that may issue in the future based on a patent application that we license or may own may be eligible for limited patent term extension under 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 product, a method for using it or a method for manufacturing it may be extended. The application for the extension must be submitted prior to the expiration of the patent for which extension is sought and within 60 days of FDA approval. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. In addition, to the extent we wish to pursue patent term extension based on a patent that we in-license from a third party, we would need the cooperation of that third party. If we are unable to obtain patent term extension or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Changes in U.S. patent and ex-U.S. patent laws could diminish the value of patents in general, thereby impairing our ability to protect our products.***

Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. In the United States, numerous recent changes to the patent laws and proposed changes to the rules of the USPTO may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. For example, the America Invents Act, involved significant changes in patent legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, some of which cases either narrow the scope of patent protection available in certain circumstances or weaken the rights of patent owners in certain situations. For example, the decision by the *U.S. Supreme Court in Association for Molecular Pathology v. Myriad Genetics, Inc.* precludes a claim to a nucleic acid having a stated

nucleotide sequence that is identical to a sequence found in nature and unmodified. Moreover, in 2012, the USPTO issued a guidance memo to patent examiners indicating that process claims directed to a law of nature, a natural phenomenon or a naturally occurring relation or correlation that do not include additional elements or steps that integrate the natural principle into the claimed invention such that the natural principle is practically applied and the claim amounts to significantly more than the natural principle itself should be rejected as directed to patent-ineligible subject matter. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once granted. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, and similar legislative and regulatory bodies in other countries in which may pursue patent protection, the laws and regulations governing patents could change in unpredictable ways, particularly with respect to pharmaceutical patent protection, that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

**Risks Related to Government Regulation**

***The regulatory approval process is highly uncertain, and we may be unable to obtain, or may be delayed in obtaining, U.S. or foreign regulatory approval and, as a result, unable to commercialize THB001 or any future product candidates. Even if we believe our current, or planned clinical trials are successful, regulatory authorities may not agree that they provide adequate data on safety or efficacy.***

THB001 and any future product candidates are subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, approval, recordkeeping, reporting, labeling, storage, packaging, advertising and promotion, pricing, post-approval monitoring, marketing and distribution of drugs. Rigorous nonclinical testing and clinical trials and an extensive regulatory approval process are required to be completed successfully in the United States and in many foreign jurisdictions before a new drug can be marketed. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that none of the product candidates we may develop will obtain the regulatory approvals necessary for us to begin selling them.

We have no prior experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when regulating us require judgment and can change, which makes it difficult to predict with certainty their application. Any analysis we perform of data from nonclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unexpected delays or increased costs due to new government regulations, for example, from future legislation or administrative action, or from changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Further, infections and deaths related to COVID-19 are disrupting certain healthcare and healthcare regulatory systems globally. Such disruptions could divert healthcare resources away from, or materially delay review by, the FDA and comparable foreign regulatory agencies. It is unknown how long these disruptions could continue, were they to occur. Any elongation or de-prioritization of nonclinical studies or clinical trials or delay in regulatory review resulting from such disruptions could materially affect the development and study of THB001 or any future product candidates. It is impossible to predict whether additional legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or the impact of such changes, if any.

Further, the FDA and its foreign counterparts may respond to any NDA that we may submit by defining requirements that we do not anticipate. Such responses could delay clinical development of THB001 or any future product candidates.

Any delay or failure in obtaining required approvals could have a material and adverse effect on our ability to generate revenues from the particular product candidate for which we are seeking approval. Furthermore, any

regulatory approval to market a product may be subject to limitations on the approved uses for which we may market the product or on the labeling or other restrictions.

We are also subject to or may in the future become subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries and may include all of the risks associated with the FDA approval process described above, as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval. FDA approval does not ensure approval by regulatory authorities outside the United States and vice versa. Any delay or failure to obtain U.S. or foreign regulatory approval for a product candidate could have a material and adverse effect on our business, financial condition, results of operations and prospects.

***Even if we receive regulatory approval for THB001 or any of THB001 or any future product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, THB001 or any future product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal. We may also be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.***

Any regulatory approvals that we obtain for THB001 or any of our future product candidates may also be subject to limitations on the approved indicated uses for which a product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing and surveillance to monitor the safety and efficacy of the product candidate.

In addition, if the FDA or a comparable foreign regulatory authority approves any of THB001 or any of our future product candidates, the manufacturing processes, labeling, packaging, distribution, post-approval monitoring and adverse event reporting, storage, import, export, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. The FDA has significant post-market authority, including the authority to require labeling changes based on new safety information and to require post-market studies or clinical trials to evaluate safety risks related to the use of a product or to require withdrawal of the product from the market. The FDA also has the authority to require a REMS after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug. The manufacturing facilities we use to make a future product, if any, will also be subject to periodic review and inspection by the FDA and other regulatory agencies, including for continued compliance with cGMP requirements. The discovery of any new or previously unknown problems with our CDMOs, manufacturing processes or facilities may result in restrictions on the product, manufacturer or facility, including withdrawal of the product from the market. If we rely on CDMOs, we will not have control over compliance with applicable rules and regulations by such manufacturers. Any product promotion and advertising will also be subject to regulatory requirements and continuing regulatory review. The FDA imposes stringent restrictions on manufacturers' communications regarding use of their products. If we promote THB001 or any of our future product candidates in a manner inconsistent with FDA-approved labeling or otherwise not in compliance with FDA regulations, we may be subject to enforcement action. Moreover, while we believe that THB001 or any future product candidates may provide better safety or effectiveness as compared to approved products, if we do not study THB001 or any future product candidates in head-to-head trials with those products, we will not be able to make comparative claims for our products, if approved. If we or our, manufacturers or service providers fail to comply with applicable continuing regulatory requirements in the United States or foreign jurisdictions in which we seek to market our products, we or they may be subject to, among other things, fines, warning letters, holds on clinical trials, delay of approval or refusal by the FDA or similar foreign regulatory bodies to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, administrative detention of products, refusal to permit the import or export of products, operating restrictions, injunction, civil penalties and criminal prosecution.

Subsequent discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our CDMOs or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

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

The FDA policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of THB001 or any of our future product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would adversely affect our business.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. Changes in FDA staffing could result in delays in the FDA's responsiveness or in its ability to review submissions or applications, issue regulations or guidance, or implement or enforce regulatory requirements in a timely fashion or at all. Similar consequences would also result in the event of another significant shutdown of the federal government such as the one that occurred from December 22, 2018 through January 25, 2019. It is difficult to predict how these requirements will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If any legislation, executive orders, or lapses in agency funding impose constraints on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

***Our operations and relationships with healthcare providers, healthcare organizations, customers and third-party payors will be subject to applicable anti-bribery, anti-kickback, fraud and abuse, transparency and other healthcare and privacy laws and regulations, which could expose us to, among other things, enforcement actions, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.***

Our current and future arrangements with healthcare providers, healthcare organizations, third-party payors and customers expose us to broadly applicable anti-bribery, fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research as well as market, sell and distribute THB001 or any of our future product candidates. In addition, we may be subject to patient data privacy and security regulation by the U.S. federal government and the states and the foreign governments in which we conduct our business. Restrictions under applicable federal and state anti-bribery and healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, individuals and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the

purchase, order or recommendation of, any good or service, for which payment may be made under a federal and state healthcare program such as Medicare and Medicaid. 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 criminal and civil false claims and civil monetary penalties laws, including the federal False Claims Act, which can be enforced through civil whistleblower or qui tam actions against individuals or entities, prohibits, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent,. knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. Moreover, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act;

- HIPAA, which prohibits, among other things, knowingly and willfully executing, or attempting to execute a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, which impose obligations on certain healthcare providers, health plans, and healthcare clearinghouses, known as covered entities, as well as their business associates and their covered subcontractors that perform certain services involving the storage, use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and require notification to affected individuals and regulatory authorities of certain breaches of security of individually identifiable health information;

- the federal legislation commonly referred to as Physician Payments Sunshine Act, enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the ACA, and its implementing regulations, which requires certain manufacturers of covered drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program, with certain exceptions, to report annually to CMS information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other health care professionals (such as physician assistants and nurse practitioners), and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members, with the information made publicly available on a searchable website;

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and

- certain 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 in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures and drug pricing information,

state and local laws that require the registration of pharmaceutical sales representatives, and state 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.

Efforts to ensure that our current and future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any such requirements, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, the curtailment or restructuring of our operations, loss of eligibility to obtain approvals from the FDA, exclusion from participation in government contracting, healthcare reimbursement or other government programs, including Medicare and Medicaid, integrity oversight and reporting obligations, or reputational harm, any of which could adversely affect our financial results.

These risks cannot be entirely eliminated. Any action against us for an alleged or suspected violation could cause us to incur significant legal expenses and could divert our management's attention from the operation of our business, even if our defense is successful. In addition, achieving and sustaining compliance with applicable laws and regulations may be costly to us in terms of money, time and resources.

***We are subject to stringent and changing obligations related to data privacy and security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and other adverse business consequences.***

In the ordinary course of business, we process personal data and other sensitive information, including our proprietary and confidential business data, trade secrets, intellectual property, data we collect about trial participants in connection with clinical trials, and other sensitive data. Our data processing activities subject us to numerous data privacy and security obligations, such as various laws, regulations, guidance, industry standards, external and internal privacy and security policies, contracts and other obligations that govern the processing of personal data by us and on our behalf.

In the United States, federal, state and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws and consumer protection laws. For example, the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, imposes specific requirements relating to the privacy, security and transmission of individually identifiable health information. At the state level, the California Consumer Privacy Act of 2018, or CCPA, imposes obligations on businesses to which it applies. These obligations include, but are not limited to, providing specific disclosures in privacy notices and affording California residents certain rights related to their personal data. Although the CCPA exempts some data processed in the context of clinical trials, the CCPA could increase compliance costs and potential liability. In addition, it is anticipated that the California Privacy Rights Act of 2020, or CPRA, effective January 1, 2023, will expand the CCPA. Other states have also enacted or proposed data privacy laws, which could further complicate compliance efforts.

Outside the United States, the European Union's General Data Protection Regulation, or EU GDPR, and the United Kingdom's GDPR, or UK GDPR, impose strict requirements for processing the personal data of individuals. For example, under the EU GDPR, government regulators may impose temporary or definitive bans on data processing, as well as fines of up to 20 million euros or 4% of annual global revenue, whichever is greater. Further, individuals may initiate litigation related to our processing of their personal data. Certain foreign jurisdictions have enacted data localization laws and cross-border personal data transfer laws, which could make

it more difficult to transfer information across jurisdictions (such as transferring or receiving personal data that originates in the EU).

Although we endeavor to comply with all applicable data privacy and security obligations, these obligations are quickly changing, creating some uncertainty as to how to comply. Further, we may at times fail (or be perceived to have failed) to have complied and could face significant consequences. These consequences may include, but are not limited to, government enforcement actions (e.g., investigations, fines, penalties, audits, inspections and similar); litigation (including class-related claims); additional reporting requirements and/or oversight; bans on processing personal data; orders to destroy or not use personal data; and imprisonment of company officials.

Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to: loss of customers; interruptions or stoppages in our business operations (including our clinical trials); interruptions or stoppages of data collection needed to train our algorithms; inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or revision or restructuring of our operations.

***We may face difficulties from healthcare legislative and regulatory reform measures.***

Existing laws and regulatory policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of THB001 or any of our future product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, or may face penalties for any approved products, and we may not achieve or sustain profitability.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. Among other things, the ACA, enacted in 2010, increased manufacturers' rebate liability under the Medicaid Drug Rebate Program, imposed a significant annual fee on companies that manufacture or import branded prescription drug products and required manufacturers to provide a discount off the negotiated price of prescriptions filled by beneficiaries in the Medicare Part D coverage gap, referred to as the "donut hole," which is now 70% of the negotiated price.

Recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several presidential executive orders, Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, reduce the costs of drugs under Medicare, and reform government program reimbursement methodologies for drug products. For example, in July 2021, President Biden issued an executive order pertaining to drug pricing, which expressed support for legislation allowing direct negotiation in Medicare Part D and inflationary rebates and directed various executive branch agencies to take actions to lower drug prices and promote generic competition. In response to Biden's executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles.

These initiatives recently culminated in the enactment of the Inflation Reduction Act, or IRA, in August 2022, which, among other things, will allow HHS to negotiate the selling price of certain drugs and biologics that CMS reimburses under Medicare Part B and Part D, although this will only apply to high-expenditure single-source drugs that have been approved for at least 7 years (11 years for biologics). The negotiated prices, which will first become effective in 2026, will be capped at a statutory ceiling price representing a significant discount from average prices to wholesalers and direct purchasers. The law will also,

beginning in October 2023, penalize drug manufacturers that increase prices of Medicare Part B and Part D drugs at a rate greater than the rate of inflation. In addition, the law eliminates the "donut hole" under Medicare Part D beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost through a newly established manufacturer discount program. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. These provisions will take effect progressively starting in 2023, although they may be subject to legal challenges. Thus, it is unclear how the IRA will be implemented but will likely have a significant impact on the pharmaceutical industry.

At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including restrictions or prohibitions on certain marketing practices, reporting of specified categories of remuneration provided to health care practitioners, and reporting and justification of price increases greater than a specified level. In some cases, states have designed programs to encourage importation from other countries and bulk purchasing, though the federal government has not yet approved any such plans. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for pharmaceuticals and other healthcare products and services, which could result in reduced demand for THB001 or any future product candidates or companion diagnostics or additional pricing pressures.

We expect that other healthcare reform measures that may be adopted in the future may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

***Even if we are able to commercialize THB001 or any of our future product candidates, such product candidate may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.***

The regulations that govern regulatory approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription biopharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if THB001 or any of our future product candidates obtain regulatory approval.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors including government authorities, such as Medicare and Medicaid, private health insurers and other organizations. Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Coverage and adequate reimbursement from third-party payors are critical to new product acceptance. Even if we succeed in bringing one or more products to the market, these products may not be considered cost-effective, and the amount reimbursed for any products may be insufficient to allow us to sell our products on a competitive basis. Because our programs are in the early stages of development, we are unable at this time to determine their cost effectiveness or the likely level

or method of coverage and reimbursement. Increasingly, the third-party payors who reimburse patients or healthcare providers, such as government and private insurance plans, are requiring that drug companies provide them with predetermined discounts from list prices, and are seeking to reduce the prices charged or the amounts reimbursed for biopharmaceutical products. If the price we are able to charge for any products we develop, or the coverage and reimbursement provided for such products, is inadequate in light of our development and other costs, our return on investment could be affected adversely.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug or therapeutic biologic will be reimbursed in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution.

Interim reimbursement levels for new drugs, if applicable, may also be insufficient to cover our costs and may not be made permanent. Reimbursement rates may be based on payments allowed for lower cost drugs that are already reimbursed, may be incorporated into existing payments for other services and may reflect budgetary constraints or imperfections in Medicare data.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Further, no uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. As a result, obtaining coverage and reimbursement approval of a product from a third-party payor is a time consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost effectiveness data for the use of our products on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates, but also have their own methods and approval process apart from Medicare determinations. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for new drugs that we develop and for which we obtain regulatory approval could have a material and adverse effect on our business, financial condition, results of operations and prospects.

***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 U.S. Foreign Corrupt Practices Act of 1977, as amended, or 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. Export controls and trade sanctions laws and regulations may restrict or prohibit altogether the provision, sale, or supply of THB001 or any future product candidates to certain governments, persons, entities, countries and territories, including those that are the target of comprehensive sanctions or an embargo. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents and contractors, 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 our products 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, or other partners 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.

***Governments outside the United States tend to impose strict price controls, which may adversely affect our revenue, if any.***

In some countries, particularly member states of the European Union, or EU, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. To obtain coverage and reimbursement or pricing approvals in some countries, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of THB001 or any future product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of any product candidate approved for marketing is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business, financial condition, results of operations or prospects could be materially and adversely affected.

**Risks Related to Our Common Stock and This Offering**

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

Prior to this offering, no market for shares of our common stock existed. As a condition to consummating this offering, our common stock offered in this prospectus must be listed on Nasdaq or another national securities exchange. Accordingly, we have applied to list our common stock on Nasdaq under the symbol “THRD.” Assuming that our common stock is listed and after the consummation of this offering, an active trading market for our shares may never develop or be sustained following this offering. To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliated public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering. Moreover, the initial public offering price for our common stock was determined through negotiations with the underwriters and the negotiated price may not be indicative of the market price of our common stock after this offering. The market value of our common stock may decrease from the initial public offering price. As a result of these and other factors, you may be unable to resell your shares of our common stock at or above the initial public offering price, if at all. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. Furthermore, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic collaborations or acquire companies or products by using our shares of common stock as consideration.

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

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

- variations in the level of expense related to the ongoing development of THB001, our lead product candidate or any future development programs;
- results of nonclinical and future clinical trials, or the addition or termination of future clinical trials or funding support by us, or existing or future collaborators or licensing partners;
- our execution of any additional collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under existing or future arrangements or the termination or modification of any such existing or future arrangements;
- any intellectual property infringement lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- if any of THB001 or any future product candidates receives regulatory approval, the terms of such approval and market acceptance and demand for such product candidates;
- the continuing effect of the COVID-19 pandemic on our business and operations;
- regulatory developments affecting THB001 or any future product candidates or those of our competitors; and
- changes in general market and economic conditions.

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

***The market 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 subject to wide fluctuations in response to various factors, some of which we cannot control, including without limitation as a result of the COVID-19 pandemic. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including the other risks described in this “Risk Factors” section and the following:

- results of nonclinical studies and future clinical trials of THB001 or any future product candidates, or those of our competitors or our existing or future collaborators;
- regulatory or legal developments in the United States or other countries, especially changes in laws or regulations applicable to THB001 or any future product candidates;

- the success or failure of competitive products or technologies;
- introductions and announcements of new product candidates by us, any future commercialization partners, or our competitors, and the timing of these introductions or announcements;
- actions taken by regulatory agencies with respect to THB001 or any future product candidates, clinical studies, and, if approved, manufacturing process or sales and marketing terms;
- actual or anticipated variations in our financial results or those of companies that are perceived to be similar to us;
- the success of our efforts to acquire or in-license additional technologies or product candidates;
- developments concerning any future collaborations, including but not limited to those with development and commercialization partners if THB001 or any future product candidates are approved;
- market conditions in the pharmaceutical and biotechnology sectors;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures or capital commitments;
- developments or disputes concerning patents or other proprietary rights, including patents, litigation matters and our ability to obtain patent protection for THB001 or any future product candidates;
- our ability or inability to raise additional capital and the terms on which we are able to raise it, if at all;
- the recruitment or departure of key personnel;
- changes in the structure of healthcare payment systems;
- actual or anticipated changes in earnings estimates, development timelines or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- announcement and expectation of additional financing efforts;
- speculation in the press or investment community;
- fluctuations of trading volume of our common stock;
- sales of our common stock by us, insiders or our stockholders;
- the concentrated ownership of our common stock;
- expiration of market stand-off or lock-up agreements;
- changes in accounting principles;

- actions instituted by activist shareholders or others;
- terrorist acts, acts of war or periods of widespread civil unrest;
- natural disasters and other calamities, including global pandemics such as the COVID-19 pandemic; and
- general economic, industry and market conditions, including rising interest rates and inflation.

In addition, the stock market in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme price and volume fluctuations that have been often unrelated or disproportionate to the operating performance of the issuer. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in this "Risk Factors" section, could have a dramatic and adverse impact on the market price of our common stock.

***You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.***

You will suffer immediate and substantial dilution with respect to the common stock you purchase in this offering. If you purchase common stock in this offering, assuming an initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and that the underwriters do not exercise their over-allotment option to purchase additional common stock in this offering, you will incur immediate dilution of $10.36 per share, representing the difference between the initial public offering price of $17.00 per share and our pro forma net tangible book value per share as of June 30, 2022, after giving effect to this offering and the conversion of all outstanding shares of our convertible preferred stock to common stock upon the completion of this offering.

For a further description of the dilution you will experience immediately after this offering, see the section titled "Dilution."

***A sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.***

Based on shares outstanding as of June 30, 2022, upon completion of this offering, we will have outstanding a total of 36,793,935 shares of common stock. Of these shares, only 9,000,000 shares of common stock sold in this offering, or 10,350,000 shares if the underwriters exercise their over-allotment option in full, will be freely tradable, without restriction, in the public market immediately after this offering. Each of our officers, directors and holders of substantially all of our outstanding equity securities have entered into lock-up agreements with the underwriters that restrict their ability to sell or transfer their shares. The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus. However, Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC may, in their sole discretion, permit our officers, directors and other current stockholders who are subject to the contractual lock-up to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, based on shares outstanding as of June 30, 2022, the shares of common stock subject to these lock-up agreements will be eligible for sale in the public market, unless held by our officers, directors and their affiliated entities, in which case such shares will be subject to volume limitations under Rule 144 under the Securities Act of 1933, as amended, or the Securities Act.

After this offering, the holders of an aggregate of 25,508,705 shares of our outstanding common stock as of June 30, 2022 (as a result of the 1-for-2.259 reverse stock split of our outstanding common stock), will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders. We also intend to

register shares of common stock that we may issue under our equity incentive plans. Once we register these shares, they will be able to be sold freely in the public market upon issuance, subject to the 180-day lock-up period under the lock-up agreements described above and in the section titled "Underwriters."

We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of our outstanding options, or the perception that such sales may occur, could adversely affect the market price of our common stock.

We also expect that significant additional capital may be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. To the extent that additional capital is raised through the sale and issuance of shares of common stock or other securities convertible into shares of common stock, our stockholders will be diluted. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares of common stock, could reduce the market price of our common stock.

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

Based on the beneficial ownership of our common stock as of August 26, 2022, prior to this offering, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately 88.5% of our voting stock and, upon the completion of this offering, that same group will hold approximately 66.8% of our outstanding voting stock (assuming no exercise of the underwriters' over-allotment option, no exercise of our outstanding options and no purchases of shares of common stock in this offering by anyone of this group). The interests of these stockholders may not be the same as or may even conflict with your interests. For example, these stockholders could delay or prevent a change of control of our Company, even if such a change of control would benefit our other stockholders, which could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our Company or our assets and might affect the prevailing market price of our common stock. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

***We are an "emerging growth company" and a "smaller reporting company" and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies or smaller reporting companies will make our common stock less attractive to investors.***

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including (i) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (ii) reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and (iii) exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not approved previously. In addition, as an emerging growth company, we are only required to provide two years of audited financial statements and two years of selected financial data in this prospectus.

We could be an emerging growth company for up to five years following the completion of this offering, although circumstances could cause us to lose that status earlier, including if we are deemed to be a "large accelerated filer," which occurs when the market value of our common stock that is held by non-affiliates equals or exceeds $700.0 million as of the prior June 30, or if we have total annual gross revenue of $1.07 billion or

more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31, or if we issue more than $1.0 billion in non-convertible debt during any three-year period before that time, in which case we would no longer be an emerging growth company immediately.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of the benefits of this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an "emerging growth company" or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act, upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which adoption is required for non-emerging growth companies and the date on which we will adopt the recently issued accounting standard.

We are also a "smaller reporting company," meaning that the market value of our common stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our common stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our common stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K, we are not required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

***If we fail to maintain proper and effective internal controls over financial reporting our ability to produce accurate and timely financial statements could be impaired.***

Pursuant to Section 404 of the Sarbanes-Oxley Act, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with annual report for our fiscal year ending December 31, 2023. This assessment will need to include the disclosure of any material weaknesses or significant deficiencies in our internal control over financial reporting identified by our management or our independent registered public accounting firm. When we become an "accelerated filer" or a "large accelerated filer," our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation. To achieve compliance with Section 404 within the prescribed period, 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. This process will be time-consuming, costly and complicated.

In connection with the preparation of our financial statements for the year ended December 31, 2021, we concluded that there was a material weakness in our internal control over financial reporting. See the section titled "—Risks Related to Our Financial Position and Need for Additional Capital—We have identified a material weakness in our internal control over financial reporting. If we do not remediate the material weakness in our internal control over financial reporting, or if we fail to establish and maintain effective internal control,

we may not be able to accurately report our financial results or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in the market price of our common stock." Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations, or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

***Anti-takeover provisions in our charter documents and under Delaware law could prevent or delay an acquisition of us, which may be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.***

Our restated certificate of incorporation and our restated bylaws that will be in effect upon completion of this offering contain provisions that could delay or prevent a change in control of our Company. These provisions could also make it difficult for stockholders to elect directors who are not nominated by current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- provide that directors may only be removed "for cause" and only with the approval of two-thirds of our stockholders;
- require super-majority voting to amend some provisions in our restated certificate of incorporation and restated bylaws;
- authorize the issuance of "blank check" preferred stock that our board of directors could use to implement a stockholder rights plan;
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting; and
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at annual stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law, or DGCL, may discourage, delay or prevent a change in control of our Company. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock.

***The exclusive forum provisions in our organizational documents may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or employees, or the underwriters of any offering giving rise to such claim, which may discourage lawsuits with respect to such claims.***

Our restated certificate of incorporation that will be in effect upon completion of this offering, to the fullest extent permitted by law, 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 arising pursuant to the DGCL, our restated certificate of incorporation, or our restated bylaws; or any action asserting a claim that is governed by the internal affairs doctrine. This exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or Exchange Act. It could apply, however, to a suit that falls within one or more of the categories enumerated in the exclusive forum provision.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, or the underwriters of any offering giving rise to such claims, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, financial condition, results of operations and prospects.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all claims brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Our restated bylaws will provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the Federal Forum Provision, including for all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. Our decision to adopt a Federal Forum Provision followed a decision by the Supreme Court of the State of Delaware holding that such provisions are facially valid under Delaware law. While federal or other state courts may not follow the holding of the Delaware Supreme Court or may determine that the Federal Forum Provision should be enforced in a particular case, application of the Federal Forum Provision means that suits brought by our stockholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all claims brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. In addition, neither the exclusive forum provision nor the Federal Forum Provision applies to suits brought to enforce any duty or liability created by the Exchange Act. Accordingly, actions by our stockholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder must be brought in federal court, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to our exclusive forum provisions, including the Federal Forum Provision. These provisions may limit a stockholders' ability to bring a claim, and may result in increased costs for a stockholder to bring such a claim, in a judicial forum of their choosing for disputes with us or our directors, officers, other employees or agents, which may discourage lawsuits against us and our directors, officers, other employees or agents.

***Because we do not anticipate paying any dividends on our capital stock for the foreseeable future, capital appreciation, if any, will be your sole source of gain and you may never obtain a return on your investment.***

We have never declared or paid dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development, operation and expansion of our business and do not anticipate declaring or paying any dividends for the foreseeable future, if at all. In addition, any future debt financings may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our

common stock. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future and you may never obtain a return on your investment. As a result, investors seeking cash dividends should not purchase our common stock.

**General Risk Factors**

***If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.***

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

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

As a public company, and particularly after we are no longer an emerging growth company or smaller reporting company, we will incur significant legal, accounting and other expenses that we did not incur as a private 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, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to 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 and we may be required to incur substantial costs to maintain sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. The increased costs may require us to reduce costs in other areas of our business. Moreover, 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.

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

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

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make any related party transaction disclosures. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected. In addition, we do not have a formal risk management program for identifying and addressing risks to our business in other areas.

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

The market price of our common stock is likely to be volatile. The stock market in general, and Nasdaq 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. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled "Prospectus Summary," "Risk Factors," "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business," contains forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressions that convey uncertainty of future events or outcomes, although not all forward-looking statements contain these words. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled "Risk Factors" and elsewhere in this prospectus. Moreover, we operate in a competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

The forward-looking statements in this prospectus include, among other things, statements about:

- our plans to develop and commercialize THB001 for the treatment of chronic inducible urticaria and our plans to further develop THB001 for the treatment of chronic spontaneous urticaria, asthma and additional indications;
- the timing to complete our clinical trials for THB001;
- our ability to develop and obtain regulatory approval for THB001 for the treatment of chronic inducible urticaria, as well as in additional indications and any other future product candidates;
- our ability to obtain funding for our operations, including funding necessary to complete further discovery, development and commercialization of THB001 and our future product candidates;
- estimates of the addressable urticaria market and market growth;
- our expectations regarding demand for, and market acceptance of, our product candidates;
- our ability to compete effectively with existing competitors and new market entrants;
- the potential effects of extensive government regulations relating to our industry;
- our ability to obtain, maintain and protect and enforce intellectual property and proprietary rights;
- our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights and proprietary technology of third parties;
- our ability to expand our pipeline of product candidates;
- our ability to attract and retain key management and technical personnel;
- the effects of the ongoing COVID-19 pandemic on any of the above or any other aspect of our business operations;
- general economic, industry and market conditions, including rising interest rates and inflation;

- our expectations regarding expenses, future revenue, capital requirements and our needs for additional financing; and
- our expected use of the net proceeds from this offering and our existing cash and cash equivalents.

The forward-looking statements made in this prospectus relate only to events or information as of the date on which the statements are made in this prospectus. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

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 AND INDUSTRY DATA

This prospectus contains estimates and other statistical data made by independent parties and by us relating to our industry and the markets in which we operate, including our general expectations and market position, market opportunity, the incidence of certain medical conditions and other industry data. In some cases, we do not
expressly refer to the sources from which these data are derived. These data, to the extent they contain estimates or projections, involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates or projections. Industry publications and other reports we have obtained from independent parties generally state that the data contained in these publications or other reports have been obtained in good faith or from sources considered to be reliable, but they do not guarantee the accuracy or completeness of such data. The industry in which we operate is subject to risks and uncertainties due to a variety of factors, including those described in the section titled “Risk Factors.” These and other factors could cause results to differ materially from those expressed in these publications and reports.

## USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $139.0 million, or approximately $160.3 million if the underwriters exercise their over-allotment option in full, assuming an initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the net proceeds to us from this offering by $8.4 million, assuming the number of shares offered, as set forth on the cover of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. Similarly, each increase or decrease of 1.0 million shares in the number of shares of our common stock offered would increase or decrease, as applicable, the net proceeds that we receive from this offering by $15.8 million, assuming that the assumed initial public offering price remains the same and after deducting the estimated underwriting discounts and commissions.

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

- approximately $80.0 to $90.0 million to advance the continued clinical development of THB001 for the treatment of urticaria, including through completion of a Phase 1b clinical trial for chronic inducible urticaria and initiation of a Phase 2 clinical trial for chronic spontaneous urticaria;

- approximately $30.0 to $40.0 million to advance the continued clinical development of THB001 in additional indications, including through completion of a Phase 1b clinical trial for asthma and to fund further development or acquisition of future programs to advance nonclinical and clinical development; and

- the remainder for potential expansion of our pipeline and other research and development activities, as well as for working capital and other general corporate purposes.

However, because the length of time and activities associated with successful research and development of THB001 or any future product candidates is highly uncertain, and the regulatory approval pathway for any product candidate is inherently difficult to predict and subject to clinical results and ongoing discussions with regulators, we are unable to estimate the actual funds we will require for development and any marketing and commercialization activities for approved products. Our future funding requirements for THB001, any future product candidates and our ongoing operations, both near and long-term, will depend on many factors. See “Risk Factors—Risks Related to Our Financial Position, Limited Operating History and Need for Additional Capital—Even if we complete this offering, we will need substantial additional funds to pursue our business objectives, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development programs, commercialization efforts or other operations.”

We expect to report initial data from our Phase 1b clinical trial for chronic inducible urticaria in the second half of 2023, and to file both a CTA in Europe and an IND in the United States to support initiation of our Phase 2 clinical trial in chronic spontaneous urticaria in the first half of 2024. We also expect to report initial data from our Phase 1b clinical trial for asthma in the second half of 2024. We believe that our existing cash and cash equivalents, together with the net proceeds from this offering, will be sufficient for us to fund our operations and capital expenses through 2025. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical drugs, we are unable to estimate the exact amount of our working capital requirements. Following this offering, we will need substantial

additional capital to complete clinical development of THB001 in any of its initial indications, to seek regulatory approval of THB001 and to commercialize THB001, if approved. We will be required to seek additional funding in the future and currently intend to do so through public or private equity offerings or debt financings, credit or loan facilities, additional licensing agreements and/or collaborations, or a combination of one or more of these funding sources.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts we actually expend in these areas, and the timing thereof, may vary significantly from our current intentions and will depend on a number of factors, including the success of research and development efforts, the results and timing of any future nonclinical studies and clinical trials, the product approval process with the FDA and other regulatory agencies, any new collaborations or licenses we may enter into, cash generated from future operations, actual expenses to operate our business and the other factors described under “Risk Factors” in this prospectus. We have based this estimate on assumptions that may prove to be wrong, however, and we could use our cash resources sooner than we expect. Additionally, the process of advancing early-stage product candidates and testing product candidates in clinical trials is costly and the timing of progress in these clinical trials is uncertain. In addition, we might decide to postpone or not pursue nonclinical studies or clinical trials or if the net proceeds from this offering and any other sources of cash are less than expected. We may also use a portion of the net proceeds of this offering to in-license, acquire or invest in complementary businesses, products, assets, or technologies, or to obtain the right to use such complementary technologies. We have no commitments with respect to any acquisition or investment.

Pending the uses described above, we intend to invest the net proceeds from this offering in short term, investment-grade interest-bearing securities such as money market accounts, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government.

## DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

## CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of June 30, 2022:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock as of June 30, 2022 into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering, and (ii) the filing and effectiveness of our restated certificate of incorporation in connection with the completion of this offering; and
- on a pro forma as adjusted basis giving effect to (i) the pro forma adjustments described above, and (ii) the sale and issuance by us of 9,000,000 shares of our common stock in this offering at the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information set forth below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

You should read this table together with the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes, each included elsewhere in this prospectus.

| | As of June 30, 2022 | | |
|---|---|---|---|
| | Actual | Pro Forma | Pro Forma As Adjusted |
| | (unaudited) | | |
| | (in thousands, except share and per share amounts) | | |
| Cash and cash equivalents | $ 112,731 | $ 112,731 | $ 251,721 |
| Convertible preferred stock, par value $0.0001 per share; 49,624,190 shares authorized, 49,624,187 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted | 170,184 | — | — |
| Stockholders' equity (deficit): | | | |
| Preferred stock, par value $0.0001 per share; no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted | | | |
| Common stock, par value $0.0001 per share; 72,731,000 shares authorized, 4,416,054 shares issued and outstanding, actual; 500,000,000 shares authorized, 27,793,935 shares issued and outstanding, pro forma; 500,000,000 shares authorized, 36,793,935 shares issued and outstanding, pro forma as adjusted | 1 | 3 | 4 |
| Additional paid-in capital | 3,143 | 173,325 | 307,924 |
| Accumulated deficit | (63,701) | (63,701) | (63,701) |
| Total stockholders' equity (deficit) | (60,557) | 109,627 | 244,227 |
| Total capitalization | $ 109,627 | $ 109,627 | $ 244,227 |

If the underwriters' over-allotment option is exercised in full, our pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' equity (deficit) and total capitalization as of June 30, 2022, would be $273.1 million, $329.3 million, $265.6 million, and $265.6 million, respectively.

Each $1.00 increase or decrease in the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of our pro forma as adjusted cash and cash equivalents, additional paid-in-capital, total stockholders' equity (deficit) and total capitalization by approximately $8.4 million, assuming that the number of shares offered remains the same and after deducting the estimated underwriting discounts and commissions. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered would increase or decrease, as applicable, each of our pro forma as adjusted cash and cash equivalents, additional paid-in-capital, total stockholders' equity (deficit) and total capitalization by approximately $15.8 million, assuming the assumed initial public offering price remains the same and after deducting the estimated underwriting discounts and commissions.

The number of shares of our common stock to be outstanding after this offering on a pro forma and pro forma as adjusted basis is based on 27,793,935 shares of common stock outstanding as of June 30, 2022 (including (i) 1,410,565 shares of unvested restricted common stock subject to repurchase and (ii) after giving effect to the automatic conversion of all of our shares of convertible preferred stock outstanding as of June 30, 2022 into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering) and excludes:

- 1,803,079 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022 under our 2019 Plan, with a weighted-average exercise price of $7.50 per share;
- 753,139 shares of our common stock issuable upon the exercise of options to purchase shares of our common shares of our common stock granted after June 30, 2022 under our 2019 Plan, with a weighted-average exercise price of $8.60 per share; and
- 5,079,624 shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:
    - 283,808 shares of our common stock reserved for future issuance under our 2019 Plan as of August 31, 2022,
    - 4,426,737 shares of our common stock to be reserved for future issuance under our 2022 Plan, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part, and
    - 369,079 shares of our common stock to be reserved for future issuance under our ESPP, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part.

Our 2022 Plan and our ESPP provide for automatic annual increases in the number of shares of our common stock reserved thereunder, and our 2022 Plan provides for increases to the number of shares that may be granted thereunder based on shares under our 2019 Plan that expire, are tendered to or withheld by us for payment of an exercise price or for satisfying tax withholding obligations or are forfeited or otherwise repurchased by us. See the section titled "Executive Compensation—Equity Compensation Plans and Other Benefit Plans" for additional information.

## DILUTION

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

Net tangible book deficit per share is determined by dividing our total tangible assets (which excludes deferred offering costs) less our total liabilities and convertible preferred stock by the number of shares of our common stock outstanding. Our historical net tangible book deficit as of June 30, 2022 was $61.6 million, or $13.96 per share, based on 4,416,054 shares of our common stock outstanding as of that date.

Our pro forma net tangible book value as of June 30, 2022 was $108.5 million, or $3.91 per share of our common stock. Our pro forma net tangible book value per share represents the amount of our total tangible assets (which excludes deferred offering costs) less our total liabilities and divided by the total number of shares of our common stock outstanding as of June 30, 2022, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering.

Dilution per share to new investors in this offering represents the difference between the initial public offering price per shares of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after completion of this offering. After giving effect to (i) the pro forma adjustments set forth above and (ii) our sale in this offering of 9,000,000 shares of our common stock at the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2022 would have been approximately $244.2 million, or $6.64 per share of our common stock. This represents an immediate increase in pro forma net tangible book value of $2.73 per share to our existing stockholders and an immediate dilution of $10.36 per share to investors in this offering, as illustrated in the following table:

| | | |
|---|---|---|
| Assumed initial public offering price per share | | $17.00 |
| Historical net tangible book deficit per share as of June 30, 2022 | $(13.96) | |
| Increase attributable to pro forma adjustments | 17.87 | |
| Pro forma net tangible book value per share as of June 30, 2022 | 3.91 | |
| Increase in pro forma net tangible book value per share attributable to new investors in this offering | 2.73 | |
| Pro forma as adjusted net tangible book value per share after this offering | | 6.64 |
| Dilution per share to new investors in this offering | | $10.36 |

Each $1.00 increase or decrease in the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, our pro forma as adjusted net tangible book value by $8.4 million, or $0.23 per share and the dilution in pro forma as adjusted net tangible book value per share to new investors in this offering by $0.77 per share, assuming the number of shares offered, as set forth on the cover of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. Similarly, each increase of 1.0 million shares in the number of shares of our common stock offered in this offering would increase our pro forma as adjusted net tangible book value by approximately $15.8 million, or approximately $0.24 per share, and would decrease dilution per share to new investors in this offering by approximately $0.24 per share and each decrease of 1.0 million shares in the number of shares of our common stock offered in this offering would decrease our pro forma as adjusted net tangible book value by approximately $15.8 million, or approximately $0.26 per share, and

would increase dilution per share to new investors in this offering by approximately $0.26 per share, assuming the assumed initial public offering price per share remains the same and after deducting the estimated underwriting discounts and commissions. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

If the underwriters exercise their over-allotment option in full, the pro forma as adjusted net tangible book value per share after this offering would be $6.96 per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $3.05 per share and the dilution to new investors in this offering would be $10.04 per share.

The following table shows, as of June 30, 2022, on a pro forma as adjusted basis described above, the differences between the existing stockholders and the new investors purchasing shares in this offering with respect to the number of shares purchased from us, the total consideration paid, which includes net proceeds received from the issuance of common and convertible preferred stock, cash received from the exercise of stock options, and the value of any stock issued for services and the weighted-average price paid per share (in thousands, except share and per share amounts, and percentages):

| | Shares Purchased | | Total Consideration | | Weighted-Average Price Per Share |
|---|---|---|---|---|---|
| | Number | Percent | Amount | Percent | |
| Existing stockholders | 27,793,935 | 75.5% | $138,355,422 | 47.5% | $ 4.98 |
| New investors | 9,000,000 | 24.5 | 153,000,000 | 52.5 | $ 17.00 |
| Total | 36,793,935 | 100.0% | $291,355,422 | 100.0% | |

Each $1.00 increase decrease in the assumed initial public offering price of $17.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, total consideration paid by new investors and total consideration paid by all stockholders by approximately $9.0 million, assuming that the number of shares offered, as set forth on the cover of this prospectus, remains the same. Similarly, each increase or decrease of 1.0 million shares in the number of shares of our common stock offered in this offering would increase or decrease, as applicable, total consideration paid by new investors and total consideration paid by all stockholders by approximately $17.0 million, assuming the assumed initial public offering price remains the same.

In addition, to the extent that any outstanding options are exercised, investors in this offering will experience further dilution.

Except as otherwise indicated, the above discussion and tables assume no exercise of the underwriters' over-allotment option. If the underwriters exercise their over-allotment option in full, our existing stockholders would own 72.9% and our new investors would own 27.1% of the total number of shares of our common stock outstanding upon the completion of this offering.

The number of shares of our common stock to be outstanding after this offering on a pro forma and pro forma as adjusted basis is based on 27,793,935 shares of common stock outstanding as of June 30, 2022 (including (i) 1,410,565 shares of unvested restricted common stock subject to repurchase and (ii) after giving effect to the automatic conversion of all of our shares of convertible preferred stock outstanding as of June 30, 2022 into an aggregate of 21,967,316 shares of our common stock immediately prior to the completion of this offering), and excludes:

- 1,803,079 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022 under our 2019 Plan, with a weighted-average exercise price of $7.50 per share;

- 753,139 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock granted after June 30, 2022 under our 2019 Plan, with a weighted-average exercise price of $8.60 per share; and

- 5,079,624 shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:

  - 283,808 shares of our common stock reserved for future issuance under our 2019 Plan as of August 31, 2022,

  - 4,426,737 shares of our common stock to be reserved for future issuance under our 2022 Plan, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part, and

  - 369,079 shares of our common stock to be reserved for future issuance under our ESPP, which will become effective immediately prior to the date of the effectiveness of the registration statement of which this prospectus forms a part.

Our 2022 Plan and ESPP provide for automatic annual increases in the number of shares of our common stock reserved thereunder, and our 2022 Plan provides for increases to the number of shares that may be granted thereunder based on shares under our 2019 Plan that expire, are tendered to or withheld by us for payment of an exercise price or for satisfying tax withholding obligations or are forfeited or otherwise repurchased by us. See the section titled “Executive Compensation—Equity Compensation Plans and Other Benefit Plans” for additional information.

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

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

*You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. See the sections titled "Special Note Regarding Forward-Looking Statements" and "Risk Factors" for a discussion of forward-looking statements and important factors that could cause actual results to differ materially from the results described in or implied by these forward-looking statements.*

### Overview

We are a clinical-stage biopharmaceutical company focused on the development of the next wave of medicine for the treatment of allergic and inflammatory diseases. Our lead product candidate, THB001, is a highly selective, oral small molecule inhibitor of KIT, a cell surface receptor that acts as the master survival and functional regulator of mast cells. Mast cells are a part of the immune system, and dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders including urticaria, asthma and gastrointestinal disorders, among others. KIT inhibition has shown positive clinical responses in mast cell mediated diseases such as asthma and chronic urticaria. In our recently completed Phase 1a clinical trial, THB001 demonstrated dose-dependent reductions of serum tryptase, a key biomarker of mast cell activity which has been shown to correlate with clinical benefit in chronic urticaria patients. We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024. We are also exploring development opportunities across a range of other indications where THB001 may provide benefit to patients suffering from mast cell driven inflammation to demonstrate the "pipeline-in-a-product" potential of THB001.

Since our inception in 2019, we have devoted substantially all of our efforts to organizing and staffing our company, business planning, raising capital, establishing our intellectual property portfolio, acquiring or discovering product candidates, research and development activities for THB001 and other compounds, establishing arrangements with third parties for the manufacture of our product candidates and component materials, and providing general and administrative support for these operations. We do not have any products approved for sale and have not generated any revenue from product sales. To date, we have financed our operations primarily with proceeds from sales of shares of our preferred stock. From inception, we have raised aggregate gross proceeds of approximately $155.0 million through the sale and issuance of our preferred stock. Our primary uses of capital are, and we expect will continue to be, research and development services, compensation and related expenses, and general overhead costs.

We have incurred significant operating losses since inception. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of THB001 and any future product candidates. Our net losses were $12.8 million and $29.6 million for the years ended December 31, 2020 and 2021, respectively, and $6.4 million and $15.5 million for the six months ended June 30, 2021 and 2022, respectively. As of June 30, 2022, we had an accumulated deficit of $63.7 million. We expect to continue to incur net operating losses for at least the next several years, and we expect our research and development expenses, general and administrative expenses, and capital expenditures will increase substantially in connection with our ongoing activities, particularly if, and as, we:

- advance THB001 through clinical development for chronic inducible urticaria, chronic spontaneous urticaria and asthma;

- conduct additional nonclinical studies and clinical trials for THB001 in additional potential indications;
- discover and develop new product candidates;
- obtain, expand, maintain, defend and enforce our intellectual property portfolio;
- manufacture, or have manufactured, nonclinical, clinical and potentially commercial supplies of THB001 and any future product candidates;
- seek regulatory approvals for THB001 or any future product candidates;
- establish a sales, marketing and distribution infrastructure to commercialize THB001 or any future product candidates, if approved;
- identify additional compounds or product candidates and acquire rights from third parties to those compounds or product candidates through licenses;
- hire additional clinical, scientific and management personnel, as well as administrative staff to support the growth of our business;
- add operational, financial and management information systems and personnel;
- incur additional legal, accounting and other costs associated with operating as a public company following the completion of this offering;
- experience delays related to the COVID-19 pandemic in the United States and in other countries in which we have planned or have active clinical trial sites and where our third-party CDMOs operate; and
- establish licenses, collaborations or strategic partnerships.

Our net losses may fluctuate significantly from period to period, depending on the timing of expenditures related to our research and development activities.

We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for a product candidate. In addition, if we obtain regulatory approval for a product candidate and do not enter into a third-party commercialization partnership, we expect to incur significant expenses related to developing our commercialization capability to support product sales, marketing, manufacturing and distribution activities.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through equity offerings, debt financings or other capital sources, which could include collaborations, strategic alliances or additional licensing arrangements. We may be unable to raise additional funds or enter into such arrangements when needed, on favorable terms, or at all. Our failure to raise capital or enter into such agreements as, and when, needed, could have a material adverse effect on our business, results of operations and financial condition, including requiring us to have to delay, reduce or eliminate product development or future commercialization efforts. The amount and timing of our future funding requirements will depend on many factors including the successful advancement of THB001 or any future product candidates. Our ability to raise additional funds may also be adversely impacted by potential worsening global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and worldwide, such as those resulting from the ongoing COVID-19 pandemic, the hostilities in Ukraine, and increasing interest rates and rates of inflation.

Because of the numerous risks and uncertainties associated with development of treatment of allergic and inflammatory diseases, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

We oversee and manage third party Contract Development and Manufacturing Organizations, or CDMOs, to support development and manufacture of THB001 for our clinical trials. We currently use two geographically-distributed CDMOs to supply our GMP drug substance. The manufacturing process has readily-sourced available raw materials and straightforward scalability. We use three geographically-distributed CDMOs for drug product manufacturing. The THB001 drug product is a cost-effective and readily scaled solid oral dosage form in standard gelatin capsules. We expect to enter into commercial supply agreements with commercial manufacturers prior to any potential regulatory approval of THB001. We continue to develop a commercial route for THB001 manufacture in alignment with our program timeline. We believe our current manufacturers are able to supply the upcoming clinical trials and additional CDMOs may be on-boarded at later stages of clinical and commercial development.

As of June 30, 2022, we had $112.7 million in cash and cash equivalents. We believe that our existing cash and cash equivalents, together with the net proceeds from this offering, will be sufficient to fund our operations and capital expenses through 2025. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. See the subsection titled “—Liquidity and Capital Resources.”

***License Agreement with Novartis International Pharmaceutical Ltd.***

On June 28, 2019, we entered into a license agreement with Novartis International Pharmaceutical Ltd. (which subsequently merged into the company Novartis Pharma AG), or Novartis, as amended, or the Novartis Agreement. Pursuant to the Novartis Agreement, Novartis granted us an exclusive, worldwide, sublicensable (subject to certain requirements therein) license under specified patent rights and know-how related to three licensed compounds to develop, make, use and sell certain products incorporating or comprising a licensed compound, including THB001, or the Licensed Products. Under the Novartis Agreement, we are solely responsible for all research, development, regulatory and commercialization activities related to the Licensed Products. We are required to use commercially reasonable efforts to develop and seek regulatory approval for, and commercialize, at least one Licensed Product in the United States, France, Germany, Italy, Spain, the United Kingdom, and Japan.

Pursuant to the Novartis Agreement, we made a one-time payment of $0.4 million to Novartis and agreed to issue shares of preferred stock pursuant to that certain Investment Letter dated as of June 27, 2019, or the Novartis Investment Letter. Pursuant to the Novartis Investment Letter, we have issued Novartis 5,970,000 shares of Series A-1 Preferred Stock. Further, we are obligated to pay Novartis up to an aggregate of: (i) $31.7 million upon the achievement of certain specified development milestones for the Licensed Products and (ii) $200.0 million upon the achievement of certain specified sales and commercialization milestones with respect to the Licensed Products. We are also required to pay Novartis, on a Licensed Product-by-Licensed Product and country-by-country basis, tiered royalties in the single-digit percentage range on annual net sales of Licensed Products, subject to reduction and offset upon certain specified events. The foregoing royalty payment obligations will expire on the latest to occur of: (a) expiration of the last valid claim of the licensed patent rights that covers such Licensed Product in such country; (b) the expiration of any regulatory exclusivity for such Licensed Product in such country; and (c) ten years following the first commercial sale of such Licensed Product in such country. Upon the expiration of such royalty term in a particular country for a particular Licensed Product, the license granted to us with respect to such Licensed Product in such country will become fully paid-up, royalty-free, transferable, perpetual and irrevocable.

For a more detailed description of this agreement, see the section titled “Business—Licenses, Partnerships and Collaborations” and Note 5 to our consolidated financial statements and our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus.

**Impact of COVID-19 on Our Business**

The COVID-19 pandemic continues to evolve, and we will continue to monitor any developments. The extent of the impact of the COVID-19 pandemic on our business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on our CDMOs, contract research organizations, or CROs, and other third parties with whom we do business, as well as its impact on regulatory authorities and our key scientific and management personnel. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. To the extent possible, we are conducting business as usual, though it is possible we may take further actions that alter our operations, including those that may be required by federal, state or local authorities, or that we determine are in the best interests of our employees and other third parties with whom we do business. Measures we have taken in response to the COVID-19 pandemic include, where feasible, conducting remote clinical trial site activations and data monitoring. However, despite these efforts, we have experienced delays in trial site initiations, patient participation and patient enrollment in our clinical trial and we may continue to experience some delays in our clinical trials and nonclinical studies and delays in data collection and analysis. At this point, the extent to which the COVID-19 pandemic may affect our business, operations and development timelines and plans, including the resulting impact on our expenditures and capital needs, remains uncertain and is subject to change. For additional details regarding the COVID-19 pandemic's impact and potential impact on our business, operations and prospects, see the section titled "Risk Factors—Risks Related to Discovery, Development and Commercialization—The COVID-19 pandemic could adversely impact our business, including the conduct of our clinical trials."

**Components of Our Results of Operations**

***Revenue***

We have not generated any revenue since our inception and do not expect to generate any revenue from the sale of products or from other sources in the near future, if at all. If our development efforts for our current product candidate, THB001, or additional product candidates that we may develop in the future are successful and result in marketing approval or if we enter into collaboration or license agreements with third parties, we may generate revenue in the future from a combination of product sales or payments from such collaboration or license agreements.

***Operating Expenses***

*Research and Development*

Research and development expenses account for a significant portion of our operating expenses and consist primarily of costs incurred in connection with the discovery, nonclinical development, clinical development and manufacturing of THB001 and potential future product candidates, and include:

*Direct Costs:*

- expenses incurred under agreements with CROs that are primarily engaged in the oversight and conduct of our clinical trials; CDMOs that are primarily engaged to provide drug substance and product for our clinical trials, research and development programs, as well as investigative sites and consultants that conduct our clinical trials, nonclinical studies and other scientific development services;
- the cost of acquiring and manufacturing nonclinical and clinical trial materials, including manufacturing registration and validation batches;
- costs of outside consultants, including their fees, stock-based compensation and related travel expenses;
- costs related to compliance with quality and regulatory requirements; and
- payments made under third-party licensing agreements.

*Indirect Costs:*

- personnel-related expenses including, salaries, benefits, stock-based compensation and other related costs for individuals involved in research and development activities; and
- facilities and other expenses not directly tied to a program.

We expense research and development costs as incurred. We recognize direct development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our vendors or our estimate of the level of service that has been performed at each reporting date. Payments for these development activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our financial statements as prepaid expenses or accrued expenses.

A significant portion of our research and development costs to date have been third-party costs, which we track on an individual product candidate basis after a clinical product candidate has been identified. Currently, our sole clinical product candidate is THB001. Our indirect research and development costs are primarily personnel-related costs and facilities and other costs. Employees and infrastructure are not directly tied to any one program and are deployed across our programs. As such, we do not track these costs on a specific program basis. We utilize third party contractors for our research and development activities and CDMOs for our manufacturing activities and we do not have our own laboratory or manufacturing facilities.

Research and development activities are central to our business model. We expect that our research and development expenses will continue to increase for the foreseeable future as we advance THB001 into multiple Phase 1b clinical trials, continue to discover and develop additional product candidates, expand our headcount and maintain, expand and enforce our intellectual property portfolio. If THB001 or any future product candidates enter into later stages of clinical development, they will generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. There are numerous factors associated with the successful development and commercialization of any product candidates we may develop in the future, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at this time based on our stage of development. Additionally, future commercial and regulatory factors beyond our control will impact our clinical development program and plans.

Our research and development expenses may vary significantly in the future based on factors, such as:

- the number and scope of nonclinical and IND-enabling studies;
- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing our product candidates;

- the phase of development of our product candidates;
- the efficacy and safety profile of our product candidates;
- the extent to which we establish additional collaboration or license agreements; and
- whether we choose to partner any of our product candidates and the terms of such partnership.

Any changes in the outcome of any of these variables with respect to the development of THB001 or any future product candidates in nonclinical and clinical development could mean a significant change in the costs and timing associated with the development of these product candidates. For example, if the FDA, EMA or another regulatory authority were to delay our planned start of clinical trials or require us to conduct clinical trials or other testing beyond those that we currently expect, or if we experience significant delays in enrollment in any clinical trials following the applicable regulatory authority's acceptance and clearance, we could be required to expend significant additional financial resources and time to complete clinical development than we currently expect. We may never obtain regulatory approval for any product candidates that we develop.

The successful development of THB001, or any product candidates we may develop in the future is highly uncertain. Therefore, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development and commercialization of THB001 and any other product candidates we may develop. We are also unable to predict when, if ever, material net cash inflows will commence from the sale of THB001 or any future product candidate, if approved. This is due to the numerous risks and uncertainties associated with product development.

*General and Administrative*

General and administrative expenses consist primarily of personnel-related expenses, including salaries, benefits and stock-based compensation expenses for personnel in executive and other administrative functions. Other significant general and administrative expenses include legal fees relating to patent, intellectual property and corporate matters, and fees paid for accounting, consulting and other professional services, and expenses for rent, insurance and other operating costs.

We expect that our general and administrative expenses will continue to increase in the foreseeable future as our business expands to support our continued research and development activities, including any future clinical trials. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, among other expenses. We also anticipate increased expenses associated with being a public company, including costs for audit, legal, regulatory and tax-related services related to compliance with the rules and regulations of the Securities and Exchange Commission, or SEC, listing standards applicable to companies listed on a national securities exchange, director and officer insurance premiums and investor relations costs. In addition, if we obtain regulatory approval for our current product candidate or any product candidates we may develop in the future and do not enter into a third-party commercialization collaboration, we expect to incur significant expenses related to building a sales and marketing team to support product sales, marketing and distribution activities.

***Total Other (Income) Expense, Net***

*Change in Fair Value of Anti-Dilution Right Liability*

We classified the anti-dilution right liability under the Novartis Agreement, as a liability on our consolidated balance sheets as the anti-dilution right liability represented a freestanding financial instrument that required us to transfer equity instruments upon future equity closings. The anti-dilution right liability was initially recorded at fair value upon the date of issuance and was subsequently remeasured to fair value at each reporting date. The issuance date fair value of the derivative liability was recognized as a research and development expense upon entering into the agreement with Novartis. Changes in the fair value of the anti-dilution right liability were recognized as a component of other expense in our consolidated statements of operations. Changes in the fair value of the anti-dilution right liability were recognized until the anti-dilution rights liability was satisfied in the first quarter of 2021.

In February 2021, in connection with our issuance and sale of the second tranche of Series A-2 Preferred Stock, we satisfied our anti-dilution right liability under the Novartis Agreement by issuing 5,970,000 total shares of Series A-1 Preferred Stock to Novartis for a total value of $6.0 million. We remeasured the fair value of the anti-dilution right liability on the date of settlement, and recorded a charge of $0.7 million, in other (income) expense, net.

*Change in Fair Value of Preferred Stock Tranche Liability*

In connection with the issuance of our Series A Preferred Stock, we granted investors future tranche rights to purchase the Preferred Stock. We classified the preferred stock tranche liability for the future purchase and option to purchase Series A Preferred Stock as a liability on our consolidated balance sheets as the preferred stock tranche liability is a freestanding financial instrument that will require us to transfer equity instruments upon future closings of the Series A Preferred Stock. The preferred stock tranche liability was initially recorded at fair value upon the date of issuance and is subsequently remeasured to fair value at each reporting date. Changes in the fair value of the preferred stock tranche liability are recognized as a component in other (income) expense, net in the consolidated statements of operations. Changes in the fair value of the preferred stock tranche liability were recognized until the tranche liability were fulfilled or otherwise extinguished in the fourth quarter of 2021.

In November 2021, in connection with our issuance and sale of Series A-3 Tranche 2, we satisfied our liability to issue additional shares under the second tranche closing and accordingly reclassified the carrying value of the preferred stock tranche liability associated with the future purchase obligation, equal to the then current value of $16.3 million, to the carrying value of the Series A-3 Preferred Stock.

*Other Income*

Other income primarily consists of interest income generated from interest bearing money market accounts.

***Income Taxes***

Since our inception, we have not recorded any income tax benefits for the net losses we have incurred in each period or for our earned research and development tax credits, as we believe, based upon the weight of available evidence, that it is more likely than not that all of our net operating loss carryforwards and tax credits will not be realized. As of December 31, 2021, we had U.S. federal and state net operating loss carryforwards of $29.8 million and $26.7 million, respectively, which may be available to offset future income tax liabilities and expire at various dates beginning in 2039. As of the six months ended June 30, 2021 and 2022, and the years ended December 31, 2020 and 2021, we have recorded a full valuation allowance against our deferred tax assets.

**Results of Operations**

***Comparison of the Six Months Ended June 30, 2021 and 2022***

The following table summarizes our results of operations for each of the periods presented (in thousands, except percentages):

| | Six Months Ended June 30, | | | |
|---|---|---|---|---|
| | 2021 | 2022 | $ Change | % Change |
| | (unaudited) | | | |
| Operating expenses: | | | | |
| Research and development | $ 6,546 | $ 10,393 | $ 3,847 | 59% |
| General and administrative | 1,010 | 5,177 | 4,167 | 413 |
| Total operating expenses | 7,556 | 15,570 | 8,014 | 106 |
| Loss from operations | 7,556 | 15,570 | 8,014 | 106 |
| Other (income) expense, net: | | | | |
| Change in fair value of anti-dilution right liability | 682 | — | (682) | (100) |
| Change in fair value of preferred stock tranche liability | (1,790) | — | 1,790 | (100) |
| Other income | (2) | (110) | (108) | 5,400 |
| Total other (income) expense, net | (1,110) | (110) | 1,000 | (90) |
| Net loss | $ 6,446 | $ 15,460 | $ 9,014 | 140% |

*Research and Development Expenses*

The following table summarizes our research and development expenses for each of the periods presented (in thousands, except percentages):

| | Six Months Ended June 30, | | | |
|---|---|---|---|---|
| | 2021 | 2022 | $ Change | % Change |
| | (unaudited) | | | |
| Direct costs: | | | | |
| THB001 | $ 4,629 | $ 6,169 | $ 1,540 | 33% |
| Other discovery and development | 1,074 | 1,975 | 901 | 84 |
| Indirect costs: | | | | |
| Personnel-related | 843 | 2,248 | 1,405 | 167 |
| Facilities and other | — | 1 | 1 | — |
| Total research and development expenses | $ 6,546 | $ 10,393 | $ 3,847 | 59% |

Research and development expenses increased by $3.8 million from $6.5 million for the six months ended June 30, 2021 to $10.4 million for the six months ended June 30, 2022. This increase was primarily attributable to the following:

- a $1.5 million increase in costs related to the clinical development of THB001 as part of the Phase 1a clinical trial phase;
- a $0.9 million increase in other discovery and development costs, primarily relating to the research and nonclinical development of discovery compounds and other programs; and
- a $1.4 million increase in personnel-related costs, including $0.3 million in stock-based compensation expense, primarily due to an increase in headcount in 2022 to support the advancement of our development efforts.

*General and Administrative Expenses*

The following table summarizes our general and administrative expenses for each of the periods presented (in thousands, except percentages):

| | Six Months Ended June 30, | | | |
|---|---|---|---|---|
| | 2021 | 2022 | $ Change | % Change |
| | (unaudited) | | | |
| Personnel-related expenses | $ 681 | $ 2,851 | $ 2,170 | 319% |
| Professional fees | 233 | 1,772 | 1.539 | 660 |
| Other expenses | 96 | 554 | 458 | 476 |
| Total general and administrative expenses | $ 1,010 | $ 5,177 | $ 4,167 | 412% |

General and administrative expenses increased by $4.2 million from $1.0 million for the six months ended June 30, 2021 to $5.2 million for the six months ended June 30, 2022. This increase was primarily attributable to the following:

- a $2.2 million increase in personnel-related costs, including $1.2 million in stock-based compensation expense, primarily due to an increase in headcount in 2022 to support the advancement of our development efforts;
- a $1.5 million increase in professional fees, driven by a $1.0 million increase to accounting and audit fees related to the preparation of this offering, $0.3 million increase in legal fees related to intellectual property-related matters, and $0.2 million increase in website and graphic fees; and
- a $0.5 million increase in other expenses primarily driven by an increased investment in professional development and education and computer and software-related expenses in preparation of this offering and operating as a public company.

We anticipate that our general and administrative expenses will increase in the future as we incur increased accounting, audit, legal, tax, regulatory, compliance, and director and officer insurance costs, as well as investor and public relations expenses associated with maintaining compliance with Nasdaq-exchange listing and SEC requirements.

*Total Other (Income) Expense, Net*

Total other (income) expense, net decreased by approximately $1.0 million from $1.1 million of income for the six months ended June 30, 2021 to $0.1 million of income for the six months ended June 30, 2022. This decrease was primarily attributable to $1.8 million in other income due to the remeasurement of the fair value of the preferred stock tranche liability that was recognized in the six months ended June 30, 2021.

***Comparison of the Years Ended December 31, 2020 and 2021***

The following table summarizes our results of operations for each of the periods presented (in thousands, except percentages):

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| | 2020 | 2021 | $ Change | % Change |
| Operating expenses: | | | | |
| Research and development | $ 9,953 | $ 15,748 | $ 5,795 | 58% |
| General and administrative | 1,166 | 3,256 | 2,090 | 179 |
| Total operating expenses | 11,119 | 19,004 | 7,885 | 71 |
| Loss from operations | 11,119 | 19,004 | 7,885 | 71 |
| Other (income) expense, net: | | | | |
| Change in fair value of anti-dilution right liability | 607 | 682 | 75 | 12 |
| Change in fair value of preferred stock tranche liability | 1,081 | 9,928 | 8,847 | 818 |
| Other income | — | (5) | (5) | 100 |
| Total other (income) expense, net | 1,688 | 10,605 | 8,917 | 528 |
| Net loss | $ 12,807 | $ 29,609 | $ 16,802 | 131% |

*Research and Development Expenses*

The following table summarizes our research and development expenses for each of the periods presented (in thousands, except percentages):

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| | 2020 | 2021 | $ Change | % Change |
| Direct costs: | | | | |
| THB001 | $ 7,212 | $ 11,062 | $ 3,850 | 53% |
| Other discovery and development | 979 | 2,105 | 1,127 | 115 |
| Indirect costs: | | | | |
| Personnel-related | 1,763 | 2,569 | 806 | 46 |
| Facilities and other | — | 12 | 12 | — |
| Total research and development expenses | $ 9,953 | $ 15,748 | $ 5,795 | 58% |

Research and development expenses increased by $5.8 million from $9.9 million for the year ended December 31, 2020 to $15.8 million for the year ended December 31, 2021. This increase was primarily attributable to the following:

- a $3.9 million increase in costs related to the nonclinical development of THB001 as it progressed into the Phase 1a clinical trial phase;
- a $1.1 million increase in other discovery and development costs, primarily relating to the research and nonclinical development of discovery compounds and other programs; and
- a $0.8 million increase in personnel-related expenses, relating to the increase in headcount in 2021 to support the advancement of our development efforts.

*General and Administrative Expenses*

The following table summarizes our general and administrative expenses for each of the periods presented (in thousands, except percentages):

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| | 2020 | 2021 | $ Change | % Change |
| Personnel-related expenses | $ 468 | $ 2,045 | $ 1,577 | 337% |
| Professional fees | 582 | 893 | 311 | 53 |
| Other expenses | 117 | 318 | 202 | 173 |
| Total general and administrative expenses | $ 1,166 | $ 3,256 | $ 2,090 | 179% |

General and administrative expenses increased by $2.1 million from $1.2 million for the year ended December 31, 2020 to $3.3 million for the year ended December 31, 2021. This increase was primarily attributable to the following:

- a $1.6 million increase in costs related to personnel-related expenses;
- a $0.3 million increase in professional fees related to legal, accounting and IT consulting costs; and
- a $0.2 million increase in other expenses primarily driven by rent and business insurance costs.

*Total Other (Income) Expense, Net*

Total other (income) expense, net increased by approximately $8.9 million from $1.7 million of expense for the year ended December 31, 2020 to $10.6 million of expense for the year ended December 31, 2021. This increase is primarily attributable to a $8.8 million increase in the expense due to the remeasurement of the fair value of the preferred stock tranche liability.

**Liquidity and Capital Resources**

***Sources of Liquidity***

Since our inception, we have incurred significant losses in each period and on an aggregate basis. We have not yet commercialized any product candidates, and we do not expect to generate revenue from sales of any product candidates or from other sources for several years, if at all. As of June 30, 2022, we had $112.7 million in cash and cash equivalents, and we had an accumulated deficit of $63.7 million. We have funded our operations primarily with gross proceeds of $155.0 million from sales of our preferred stock.

***Cash Flows***

The following table provides information regarding our cash flows for each of the periods presented (in thousands):

| | Year Ended December 31, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2021 | 2021 | 2022 |
| | | | (unaudited) | |
| Net cash used in operating activities | $ (9,187) | $ (15,746) | $ (7,251) | $ (14,852) |
| Net cash used in investing activities | — | — | — | — |
| Net cash provided by (used in) financing activities | 10,825 | 135,749 | 15,921 | (697) |
| Net increase (decrease) in cash and cash equivalents | $ 1,638 | $ 120,003 | $ 8,670 | $ (15,549) |

*Net Cash Used in Operating Activities*

Net cash used in operating activities for the year ended December 31, 2020 was $9.2 million, and was primarily due to our net loss of $12.8 million, which included a non-cash charge of $1.7 million related to the changes in fair value of the preferred stock tranche liability and anti-dilution right liability, and changes of working capital consisting of a $1.9 million increase in accrued expenses and other current liabilities and accounts payable.

Net cash used in operating activities for the year ended December 31, 2021 was $15.7 million, and was primarily due to our net loss of $29.6 million, which included a non-cash charge of $10.6 million related to the changes in fair value of the preferred stock tranche liability and anti-dilution right liability, and changes of working capital consisting of a $3.5 million increase in accrued expenses and other liabilities, and $0.5 million in stock-based compensation expense, partially offset by $0.7 million decrease in prepaid expenses and other current assets.

Net cash used in operating activities for the six months ended June 30, 2021 was $7.3 million, and was primarily due to our net loss of $6.4 million, which included a non-cash gain of $1.8 million related to the change in fair value of the preferred stock tranche liability and a non-cash charge of $0.7 million related to the change in fair value of the anti-dilution right liability, and changes of working capital consisting of a $0.4 million increase in accrued expenses and other current liabilities and accounts payable.

Net cash used in operating activities for the six months ended June 30, 2022 was $14.8 million, and was primarily due to our net loss of $15.5 million, and changes in working capital consisting of an increase of $0.3 million in prepaid expenses, a $1.6 million stock-based compensation expense, and an increase of $0.4 million in accounts payable, partially offset by a $1.6 million decrease in accrued expenses and other current liabilities.

*Net Cash Provided by (Used in) Investing Activities*

We had no investing activities for the years ended December 31, 2020 and 2021 and the six months ended June 30, 2021 and 2022.

*Net Cash Provided by Financing Activities*

Net cash provided by financing activities for the year ended December 31, 2020 was $10.8 million, resulting entirely from proceeds received from the issuance and sale of shares of our Series A Preferred Stock, net of issuance costs.

Net cash provided by financing activities for the year ended December 31, 2021 was $135.7 million, resulting from proceeds of $30.9 million received from the issuance and sale of shares of our Series A Preferred Stock, net of issuance costs, and $104.8 million received from the issuance and sale of shares of our Series B Preferred Stock, net of issuance costs.

Net cash provided by financing activities for the six months ended June 30, 2021 was $15.9 million, resulting entirely from proceeds received from the issuance and sale of shares of our Series A Preferred Stock, net of issuance costs.

Net cash used in financing activities for the six months ended June 30, 2022 was $0.7 million, resulting from costs incurred in preparation of this offering.

***Funding Requirements***

Our primary uses of capital are, and we expect will continue to be, research and development services, compensation and related expenses and general overhead costs. We expect to continue to incur significant expenses and operating losses for the foreseeable future. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. We anticipate that our expenses will increase significantly in connection with our ongoing activities.

Based on our current operating plan, we believe that our existing cash and cash equivalents, without taking into consideration the net proceeds from this offering, will be sufficient to fund our operations and capital expenses through at least the next 12 months from the date of this prospectus. In addition, we believe that our existing cash and cash equivalents, together with the net proceeds from this offering, will be sufficient to fund our operations and capital expenses through 2025. However, we have based this estimate on assumptions that may prove to be wrong, and we could exhaust our 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 working capital requirements. Our future funding requirements will depend on, and could increase significantly as a result of, many factors, including:

- the timing, cost and progress of nonclinical and clinical development activities;
- the cost of regulatory submissions and timing of regulatory approvals;
- the number and scope of nonclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we may in the future enter into collaborations and/or research and development agreements;
- the timing and amount of milestone and other payments we are obligated to make under our Novartis Agreement or any future license agreements;
- the cash requirements of any future acquisitions or discovery of product candidates;
- our ability to establish and maintain collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties on favorable terms, if at all;
- the costs involved in prosecuting and enforcing patent and other intellectual property claims;
- the costs of manufacturing our product candidates by third parties;
- the cost of commercialization activities if THB001 or any future product candidates are approved for sale, including marketing, sales and distribution costs;
- our efforts to enhance operational systems and hire additional personnel, including personnel to support development of our product candidates; and
- our need to implement additional internal systems and infrastructure, including financial and reporting systems to satisfy our obligations as a public company.

A change in the outcome of any of these or other variables with respect to the development of our THB001 or any product or development candidate we may develop in the future could significantly change the costs and timing associated with our development plans. Further, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings or other capital sources, which could include collaborations, strategic alliances or licensing arrangements. We currently have no credit facility or committed sources of capital. Adequate additional funds may not be available to us on acceptable terms, or at all. To the

extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our existing stockholders may be diluted, and the terms of these securities may include liquidation or other preferences that could adversely affect the rights of such stockholders. Debt financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, that could adversely impact our ability to conduct our business. If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research program or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic or otherwise. Because of the numerous risks and uncertainties associated with product development, there is no assurance that we will ever be profitable or generate positive cash flow from operating activities.

**Contractual Obligations and Other Commitments**

***Novartis Agreement***

We may incur contingent royalty payments that we are required to make under the Novartis Agreement. Due to the uncertainty of the achievement and timing of the events requiring payment under our license agreement with Novartis, the amounts to be paid by us are not fixed or determinable at this time. We are required to pay Novartis royalties on all sales of licensed products, with such royalty percentages in the mid-single digits of sales. We have not paid any royalties to date as we have no products commercially approved for sale. For additional information regarding the license agreement and royalties payable to Novartis, see the subsection titled "—License Agreement with Novartis International Pharmaceutical Ltd.," the section titled "Business—Licenses, Partnerships and Collaborations" and Note 5 to our audited consolidated financial statements and our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus.

***Lease Obligations***

Our leases are comprised of month-to-month office space leases entered into with Atlas for various office suites located at 300 Technology Square in Cambridge, Massachusetts, with us acting as a subtenant.

***Purchase and Other Obligations***

We enter into contracts in the normal course of business with CROs, CDMOs and other third-party vendors for nonclinical research studies and testing, clinical trials and testing and manufacturing services. Most contracts do not contain minimum purchase commitments and are cancellable by us upon written notice. Payments due upon cancellation consist of payments for services provided or expenses incurred, including non-cancelable obligations of our service provided up to one year after the date of cancellation.

**Critical Accounting Policies**

This management's discussion and analysis is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles or GAAP. The preparation of our consolidated financial statements and related disclosures requires us to make judgments and estimates that affect the reported amounts of assets, liabilities and expenses, as well as related disclosures during the reported periods. We base our estimates on historical experience, known trends and events, and various other factors that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different

assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates, if any, will be reflected in the financial statements prospectively from the date of change in estimates.

While our accounting policies are described in more detail in the notes to our consolidated financial statements included elsewhere in this prospectus, we believe the following accounting policies used in the preparation of our financial statements require the most significant judgments and estimates.

***Accrued and Prepaid Research and Development Expenses***

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

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

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

***Preferred Stock Tranche Liability***

The fair value of the preferred stock tranche liability recognized in connection with our Series A-1 Preferred Stock financing in July 2019, Series A-2 Preferred Stock financing in July 2020, and Series A-3 Preferred Stock financing in February 2021, was determined based on significant inputs not observable in the market, which represent Level 3 measurements within the fair value hierarchy. The fair value of the preferred stock tranche liabilities were estimated based on results of a third party valuation performed in connection with each redeemable convertible preferred stock issuance.

A change in the assumptions related to the valuation of the tranche liability could have a significant impact on the value of the liability. The tranche liability was valued as a forward contract. The value was determined using an option pricing model, in which fair value was determined using the Black-Scholes option pricing model. In determining the fair value of the tranche liability, estimates and assumptions impacting the fair value included

the estimated future values of the Company's Preferred Stock, discount rates, estimated time to tranche closing, and probability of each tranche closing. We remeasured the preferred stock tranche liabilities at each reporting period and prior to settlement.

***Anti-Dilution Right Liability***

The initial fair value of the anti-dilution right liability issued to Novartis in June 2019 was determined based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The fair value was estimated using a Monte Carlo analysis to simulate the fair value of the preferred stock to be issued to maintain the fully diluted ownership percentages based on the expected financing dates. Changes in the estimated fair value and the probability of achieving different financing scenarios can have a significant impact on the fair value of the anti-dilution right liability. We remeasured the anti-dilution right at each reporting period and prior to settlement.

***Stock-Based Compensation***

We measure stock-based payment awards granted to employees and non-employees as stock-based compensation expense at fair value, based on the date of the grant, and recognizes compensation expense for those awards over the requisite service period, which is generally the vesting period of the respective award. Our stock-based payments include stock options and grants of restricted stock awards. For stock-based awards with service-based vesting conditions, we recognize compensation expense using the straight-line method. For awards with both performance and service-based vesting conditions, we record expense using an accelerated attribution method, once the performance conditions are considered probable of being achieved, using our best estimates.

At inception of the 2019 Stock Incentive Plan, we adopted the guidance of Accounting Standards Update, or ASU, No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, or ASU No. 2018-07, prior to the issuance of any stock option grants. The measurement date for non-employee awards is the date of grant without changes in the fair value of the award. Stock-based compensation costs for non-employees are recognized as expense over the vesting period on a straight-line basis.

We classify stock-based compensation expense in our statements of operations in the same manner in which the award recipient's salary and related costs are classified or in which the award recipient's service payments are classified.

The fair value of each stock option is estimated on the grant date using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions, including:

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

- *Expected Term*—The expected term represents the period that the stock-based awards are expected to be outstanding. We use the simplified method to determine the expected term, which is based on the average of the time-to-vesting and the contractual life of the options.

- *Expected Volatility*—Because we have been privately held and do not have any trading history for our 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 the similar size, stage in life cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.

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

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

The fair value of each restricted common stock award is estimated on the date of grant based on the fair value of our common stock on that same date. See Note 8 to our consolidated financial statements included elsewhere in this prospectus for information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the years ended December 31, 2020 and 2021.

We recorded stock-based compensation expense of $0.1 million and $1.6 million for the six months ended June 30, 2021 and 2022, respectively. As of June 30, 2022, there was $9.1 million of unrecognized stock-based compensation expense related to unvested stock options, to be recognized over a weighted-average period of 0.38 years. In future periods, we expect our stock-based compensation expense to increase, due in part to our existing unrecognized stock-based compensation expense and as we grant additional stock-based awards to continue to attract and retain our employees.

Based on an assumed initial public offering price of $17.00 per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, the aggregate intrinsic value of vested and unvested stock options outstanding as of June 30, 2022 was $2.3 million and $16.5 million, respectively.

***Common Stock Valuations***

Historically, for all periods prior to this offering, as there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors, with input from management, as of the date of each award grant, considering our most recently available independent third-party valuations of common stock and any additional objective and subjective factors that we believed were relevant and which may have changed from the date of the most recent valuation through the date of each award grant. The independent third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. We determined that based on our stage of development and other relevant factors, it was most appropriate to prepare our common stock valuations using the option-pricing method, or OPM, which used a market approach to estimate our enterprise value. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. In the course of preparing for this offering, we performed retrospective fair value assessments of all options granted during the years ended December 31, 2021 and 2022 and the six months ended June 30, 2022 solely for accounting purposes. We applied the fair values of our common stock from our retrospective fair value assessments to determine the fair value of these awards and calculate stock-based compensation expense solely for accounting purposes. These reassessed values were based, in part, upon third-party valuations of our common stock prepared as of each grant date on a retrospective basis. The third-party valuations were prepared using the hybrid method and used market approaches to determine our enterprise value. The hybrid method also uses a market approach to estimate our enterprise value. It is a probability-weighted expected return method, or PWERM, where the equity value in one or more scenarios is calculated using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of our common stock based upon an analysis of our future values, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock.

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

Given the absence of a public trading market, our board of directors with input from management considered numerous objective and subjective factors to determine the fair value of common stock. The factors included, but were not limited to:

- contemporaneous valuations performed by an independent third-party valuation firm;
- our stage of development and material risks related to our business;
- the progress of our research and development programs, including the status and results of nonclinical studies and clinical trials;
- our business conditions and projections;
- sales of our preferred stock;
- the rights, preferences and privileges of our preferred stock relative to those of our common stock;
- lack of marketability of our common and preferred stock as a private company;
- our operating results and financial performance;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company, in light of prevailing market conditions;
- the trends, developments and conditions in the life sciences and biopharmaceutical industry sectors;
- analysis of initial public offerings and the market performance and stock price volatility of similar public companies in the life sciences and biopharmaceutical sectors; and
- the economy in general.

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

**Internal Controls Over Financial Reporting**

A company's internal control over financial reporting is a process designed by, or under the supervision of, a company's principal executive and principal financial officers, or persons performing similar functions, and effected by a company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. A material weakness is a significant deficiency, or a combination of significant deficiencies, in internal control over financial reporting such that it is reasonably possible that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

In preparing our financial statements as of and for the year ended December 31, 2021, management identified a material weakness in our internal control over financial reporting. The material weakness we identified related to the lack of segregation of duties, certain system limitations in our accounting software and the overall control environment as we had insufficient internal resources with appropriate accounting and finance knowledge and expertise to design, implement, document and operate effective internal controls around our financial reporting process.

We are implementing measures designed to improve our internal control over financial reporting to remediate this material weakness, including formalizing our processes and internal control documentation and strengthening supervisory reviews by our financial management; hiring additional qualified accounting and finance personnel and engaging financial consultants to enable the implementation of internal control over financial reporting and segregating duties amongst accounting and finance personnel. In addition, we are in the process of selecting and implementing an accounting software system with the design and functionality to segregate incompatible accounting duties, which we currently expect will be fully implemented in our 2023 fiscal year.

While we are implementing these measures, we cannot assure you that these efforts will remediate our material weakness and significant deficiencies in a timely manner, or at all, or prevent restatements of our financial statements in the future. In particular, we do not currently expect that our material weakness related to our accounting software will be fully remediated for the fiscal year ended December 31, 2022 as we expect to implement new software in 2023. If we are unable to successfully remediate our material weakness, or identify any future significant deficiencies or material weaknesses, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports, and the market price of our common stock may decline as a result.

**Emerging Growth Company and Smaller Reporting Company Status**

Under Section 107(b) of the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, an “emerging growth company” can delay the adoption of new or revised accounting standards until such time as those standards would apply to private companies. We have elected this exemption to delay adopting new or revised accounting standards until such time as those standards apply to private companies. Where allowable we have early adopted certain standards as described in Note 2 of our consolidated financial statements included elsewhere in this prospectus. As a result, our consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates. We will continue to remain an “emerging growth company” until the earliest of the following: (i) the last day of the fiscal year following the fifth anniversary of the date of the completion of this offering; (ii) the last day of the fiscal year in which our total annual gross revenue is equal to or more than $1.07 billion; (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

We are also a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million.

If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

**Recent Accounting Pronouncements**

We have reviewed all recently issued accounting pronouncements and have determined that, other than as disclosed in Note 2 to our condensed consolidated financial statements included elsewhere in this prospectus, such standards do not have a material impact on our financial statements or do not otherwise apply to our operations.

**Off-Balance Sheet Arrangements**

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

**Quantitative and Qualitative Disclosures About Market Risk**

***Interest Rate Risk***

Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our cash equivalents are in the form of standard checking accounts and amounts held in money market funds that are invested in U.S. Treasury securities. Interest income is sensitive to changes in the general level of interest rates. However, due to the short-term maturities of our cash equivalents, we believe a hypothetical 100 basis point increase or decrease in interest rates during any of the periods presented would not have had a material impact on our consolidated financial statements included elsewhere in this prospectus.

As of June 30, 2022, we had no debt outstanding and therefore were not exposed to related interest rate risk.

***Foreign Currency Exchange Risk***

All of our employees and our operations are currently located in the United States and our expenses are generally denominated in U.S. dollars. We therefore are not currently exposed to significant market risk related to changes in foreign currency exchange rates. However, we have contracted with and may continue to contract with non-U.S. vendors who we may pay in local currency. Our operations may be subject to fluctuations in foreign currency exchange rates in the future. To date, foreign currency transaction gains and losses have not been material to our financial statements, and we have not had a formal hedging program with respect to foreign currency. We believe a hypothetical 100 basis point increase or decrease in exchange rates during any of the periods presented would not have a material effect on our consolidated financial statements included elsewhere in this prospectus.

***Effects of Inflation***

Inflation generally affects us by increasing our cost of labor and clinical trial costs. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, we may experience some effect in the near future (especially if inflation rates continue to rise) due to an impact on the costs to conduct clinical trials, labor costs we incur to attract and retain qualified personnel, and other operational costs. Inflationary costs could adversely affect our business, financial condition and results of operations.

# BUSINESS

## Overview

We are a clinical-stage biopharmaceutical company focused on the development of the next wave of medicine for the treatment of allergic and inflammatory diseases. Our lead product candidate, THB001, is a highly selective, oral small molecule inhibitor of KIT, a cell surface receptor that acts as the master survival and functional regulator of mast cells. Mast cells are a part of the immune system, and dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders including urticaria, asthma and gastrointestinal disorders, among others. KIT inhibition has shown positive clinical responses in mast cell mediated diseases such as asthma and chronic urticaria. In our recently completed Phase 1a clinical trial, THB001 demonstrated dose-dependent reductions of serum tryptase, a key biomarker of mast cell activity which has been shown to correlate with clinical benefit in chronic urticaria patients. We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024. We are also exploring development opportunities across a range of other indications where THB001 may provide benefit to patients suffering from mast cell driven inflammation to demonstrate the "pipeline-in-a-product" potential of THB001. There is no guarantee that any CTA that we submit will be approved, and even if a CTA were to be approved, there is no guarantee that our trials will begin within our anticipated timeframe.

Mast cells are a main driver of allergic inflammatory responses. They are present throughout the body in connective and vascularized tissues, most prominently along surface boundaries with exposure to the external environment: in the skin, the respiratory tract and the gastrointestinal tract. For many patients suffering from allergic conditions, inhibition of mast cell derived mediators, including histamines, leukotrienes and prostaglandins, has demonstrated insufficient therapeutic value to date given that many mast cell-driven disorders involve multiple pro-inflammatory mediators. As a result, we believe that targeting mast cells directly through highly selective inhibition of KIT is key to achieving the clinical efficacy needed for broad symptomatic relief across a range of allergic and other inflammatory disorders.

Since KIT is a cell surface receptor that acts as the master regulator of mast cell function and survival, our approach impacts mast cells directly and provides what we believe to be a favorable point of intervention. Furthermore, significant clinical and nonclinical data has been generated internally and by third parties that demonstrate that KIT is a potential target for broad and potentially clinically differentiated inhibition of mast cells. For example, an anti-KIT antibody demonstrated positive clinical responses in chronic inducible urticaria patients in a third-party Phase 1 trial.

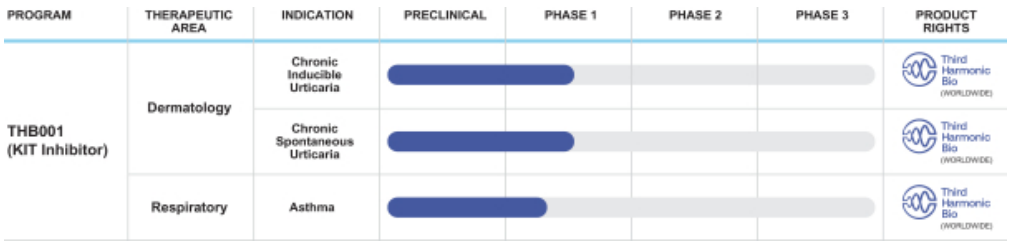
Our lead product candidate THB001 is a potent and highly selective, oral small molecule wild-type KIT inhibitor in development for the treatment of mast cell mediated inflammatory diseases. In nonclinical studies, THB001 demonstrated what we believe to be evidence of highly selective KIT inhibition and mast cell depletion in skin, respiratory and gastrointestinal tissues with a potent therapeutic profile. We believe that chronic inducible urticaria represents an attractive initial clinical indication for THB001 as a precursor for chronic spontaneous urticaria, given the ability to efficiently evaluate clinical activity outcomes through provocation testing, in concert with biomarker measures of mast cell activity and safety data. Our goal is to be a leader in the oral KIT inhibitor space, and we continue to invest in formulation and discovery for next generation molecules. In addition to initially developing THB001 for treatment of chronic urticaria, we are exploring THB001 as a potential treatment for other indications where mast cell dysfunction plays a key role.

In our recently completed Phase 1a trial in healthy volunteers, we have observed dose dependent increases in THB001 serum concentration levels above the protein binding adjusted KIT cellular $IC_{50}$ value. As positive signs of the potential efficacy of THB001, we observed that dose levels of 200 mg once daily, or QD, 200 mg

twice daily, or BID, and 400 mg BID resulted in dose dependent declines in serum tryptase. The twice daily dose at the 400 mg level of THB001 resulted in mean serum tryptase that was at the lower limit of quantification. Reductions in serum tryptase have been associated with a robust clinical response in a clinical trial of an anti-KIT antibody in chronic inducible urticaria patients conducted by a third party. Furthermore, THB001 was well-tolerated, with no serious adverse events, or SAEs, one moderate adverse event that led to discontinuation and one mild adverse event that led to discontinuation, but was deemed not related to the drug, in the trial to date.

We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, which has been cleared in the Netherlands and Germany. We initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024.

There remains a large unmet need in chronic urticaria. Epidemiological studies indicate that up to 25% of the population suffers from urticaria at some point in their lifetime, with 0.5-1% of the population suffering from the disease at any point in time, suggesting a point prevalence of over 1.5 million patients in the United States. Approximately 70% to 80% of patients with urticaria are women. Many patients are first provided H1 antihistamine therapy when diagnosed with urticaria; however, there remains a large unmet need. Approximately 50% of chronic spontaneous urticaria patients continue to experience itch and hives despite H1 antihistamine treatment at FDA-approved doses. There have been no new approved therapies to treat chronic urticaria in eight years, and the most recently approved treatment, the injectable biologic Xolair, provided complete hive and itch symptom relief to approximately 36% of patients in clinical trials. We believe Xolair is currently addressing less than 20% of eligible patients whose symptoms have failed to be controlled by H1 antihistamine therapy. There is a clear unmet need for chronic urticaria treatments that provide higher levels of complete hive and itch symptom relief, while also providing improved patient comfort and convenience via an oral route of administration. We believe an oral therapy offers clear advantages over an injectable therapy, and an oral therapy with the potential to improve upon the results of the existing standard of care offers a significant opportunity to address a large unmet need. While the potential market opportunity within urticaria alone is vast, dysfunctional mast cell activity has also been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders, including respiratory and gastrointestinal disorders. Furthermore, in nonclinical studies, THB001 has demonstrated the ability to deplete mast cells across different tissue types, which we believe supports its ability to potentially treat a range of mast cell mediated skin, respiratory and gastrointestinal conditions supporting our ultimate goal of THB001 achieving its potential as a “pipeline-in-a-product.” The table below reflects our initial targeted indications for THB001.




**Our Team and Investors**

Founded by Atlas Venture in 2019, we are led by a strong management team with diverse backgrounds and significant experience in drug discovery, development and company building, as well as a demonstrated track record of delivering breakthrough therapeutic approaches for patients. Our management team are industry veterans with extensive experience at biopharmaceutical companies such as Audentes, Cadent Therapeutics,

Genentech/Roche, Gilead Sciences, Morphic Therapeutic and Pfizer. Together, our team has a proven track record in the discovery, development and commercialization of numerous approved therapeutics.

Since our inception, we are supported by and have raised approximately $155 million of capital from a group of premier life science investors including Atlas Venture, OrbiMed, BVF Partners L.P., General Atlantic, RA Capital, RTW Investments, Boxer Capital, Deep Track Capital, Commodore Capital and Ajax Health|Zeus.

**Our Strategy**

Our goal is to develop the next wave of medicine for the treatment of allergic and inflammatory diseases. The key components of our strategy are to:

- **Continue to advance THB001 through clinical development in chronic urticaria.** Chronic urticaria represents a significant unmet need as there is a large patient population who remain poorly controlled or elect not to take the standard of care injectable biologic therapy prescribed for antihistamine refractory patients. We believe that a highly selective, convenient, oral small molecule KIT inhibitor that targets mast cells directly provides a potentially new compelling treatment option. We believe THB001's potency, selectivity, tolerability profile and oral bioavailability offers a promising therapeutic profile for the substantial chronic urticaria market. We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023.

- **Continue to advance THB001 into our second indication in asthma.** Given the prior clinical validation of small molecule KIT inhibition for the treatment of asthma, we believe asthma is a potential second indication for THB001. In clinical results by a third party published in *The New England Journal of Medicine*, imatinib, a multi-tyrosine kinase inhibitor that has demonstrated KIT inhibitory activity, achieved a 43% reduction in plasma levels of serum tryptase, a biomarker used to assess mast cell activation, for patients with severe refractory asthma, which resulted in a statistically significant decrease in airway hyperresponsiveness at 24 weeks. We believe these results provide compelling clinical proof-of-concept that mast cell reduction may drive meaningful symptomatic relief. In addition, in nonclinical studies, THB001 produced statistically significant airway improvements in a rat model of allergic asthma. We intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024.

- **Develop THB001 in a broad range of indications across therapeutic areas where mast cell driven inflammation can benefit from THB001's product profile, including in the skin, respiratory and gastrointestinal tracts.** We believe that KIT inhibition may find wide therapeutic utility across a range of inflammatory indications as mast cells are present in numerous tissue types. There are multiple skin, respiratory and gastrointestinal conditions such as atopic dermatitis, prurigo nodularis, chronic rhinusitis, allergic conjunctivitis, eosinophilic esophagitis and irritable bowel syndrome, where we believe mast cells maintain a vital role in driving the pathophysiology of the disease. We believe these potential extension opportunities represent attractive markets with clinical unmet need and established development and regulatory pathways. In our nonclinical studies, THB001 has demonstrated the ability to potently deplete mast cells across a variety of tissue types tested in rats and dogs.

- **Continue to innovate and potentially expand the pipeline through our internal discovery efforts and selectively evaluate strategic collaborations.** Our team brings invaluable experience from all aspects of drug discovery, clinical development, business development and commercialization. We will continue to invest in research and development and evaluate potential selective collaboration opportunities to build upon our deep know-how around oral small molecule KIT inhibition to potentially advance next-generation compounds and expand our pipeline in allergic and inflammatory diseases.

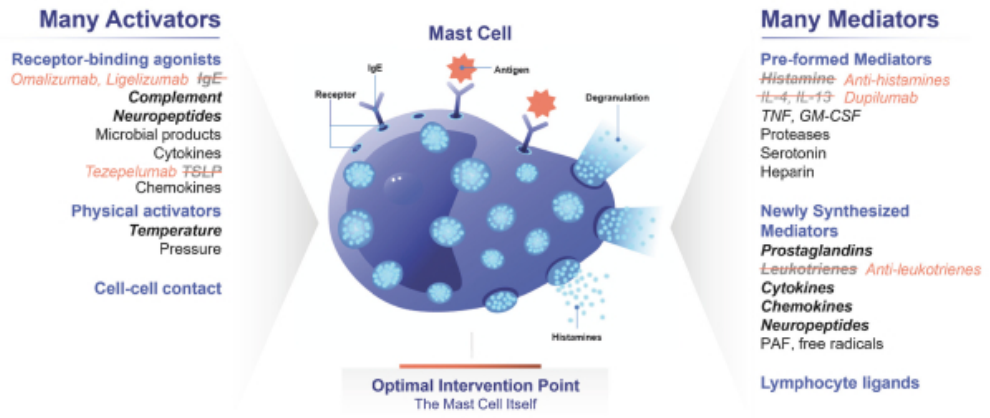
**Overview of Mast Cells and KIT**

***Mast Cells and Their Role in Immunity***

Mast cells derive from KIT-positive hematopoietic progenitors in the bone marrow and are present throughout the body in connective and vascularized tissues, most prominently along surface boundaries with exposure to the external environment such as the skin, the respiratory tract and the gastrointestinal tract. Their numerous physiological functions include regulation of inflammation, vasodilation, vascular homeostasis and angiogenesis as well as involvement in the control of other elements of the immune response. Dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders, including urticaria, asthma and gastrointestinal disorders, among others.

The cytoplasm of mast cells stores inflammatory mediators including histamine, the proteolytic enzyme tryptase, and various cytokines including interleukins IL-4, IL-5 and IL-13, and Tumor Necrosis Factor-a, or TNF-a. Mast cells express multiple cell-surface receptors, one of which is FceR that has particularly high affinity for immunoglobin E, or IgE, antibodies. As shown in the figure below, upon the stimulation of IgE, change of temperature, or pressure, a signaling cascade leads to activation of the mast cell and its degranulation resulting in the release of tryptase, histamine and other inflammatory mediators. In addition to IgE dependent activation, other IgE independent stimuli can also trigger mast cell activation. The release of inflammatory mediators can manifest into a broad range of allergic or inflammatory diseases. Moreover, mast cell activation and degranulation lead to the recruitment of other progenitor cells to the specific tissue site and the propagation of the inflammatory response.

*Mast cells mediate multiple pro-inflammatory activities*




In the skin, antigens activate mast cells in the deep layers of connective tissue triggering the release of histamine and other vasoactive molecules, and causing allergic reactions, including urticaria. In chronic urticaria, patients will develop wheals, together with the sensations of pain and itch. If antigens activate mast cells deeper in the tissue this can lead to angioedema. Another chronic skin disorder involving mast cells is atopic dermatitis, or eczema.

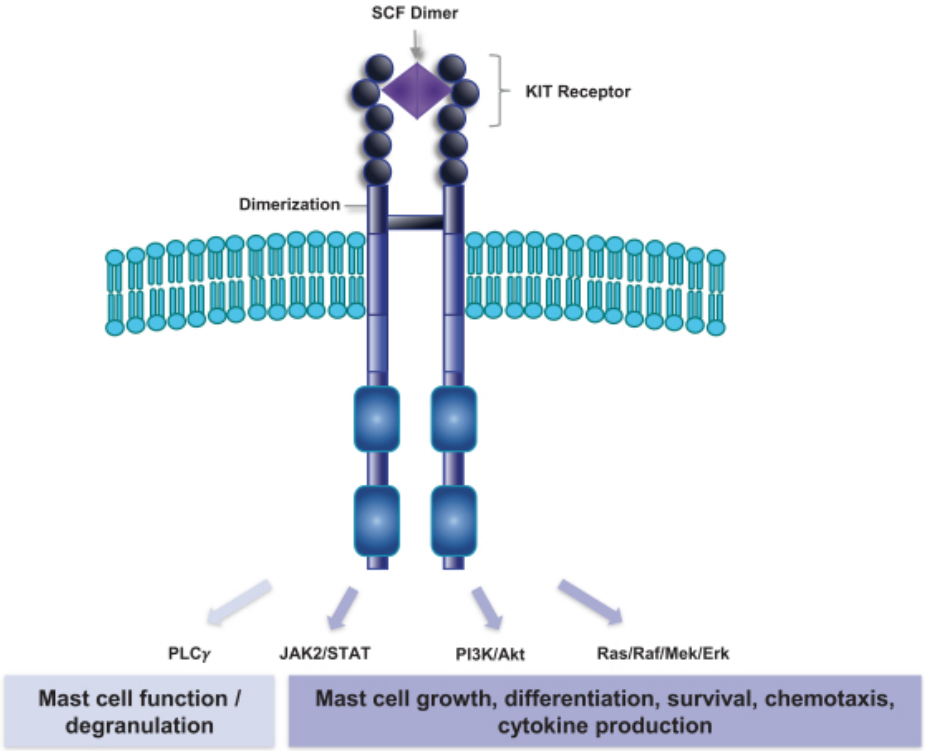
In the respiratory tract, mucosal mast cells in the nasal epithelium are activated by inhaled antigens, eliciting an immune response and resulting in airway constriction, increased mucous production and cough. Mast cells also play a role in the pathophysiology of asthma which is caused by an inflammatory response in the airways due to inhaled antigens that get into the lower respiratory tract and cause mast cell degranulation and local inflammation. This leads to symptoms characteristic of asthma including increased vascular permeability, fluid accumulation, edema, bronchial constriction and obstruction of airways.

In the gastrointestinal tract, dietary proteins can act as antigens and activate the immune system in affected individuals. Antigens permeate the epithelial layer of the mucosa of the gut and bind to IgE antibodies on mucosal mast cells. Elevated numbers of activated mast cells have been observed in allergic eosinophilic gastrointestinal disorders, including eosinophilic esophagitis, gastritis and duodenitis. Mast cells are also involved in the pathophysiology of irritable bowel syndrome and, inflammatory bowel disease, including driving symptomology via their close interaction with nerves.

***KIT Signaling in Mast Cells is a Central Node for Therapeutic Intervention***

The receptor tyrosine kinase KIT, also known as CD117, is recognized as a master regulator of mast cell activity. Under normal physiological conditions, mast cell progenitors circulate in an immature form and only fully develop into mature mast cells upon migration to a specific tissue type. Mature mast cells remain localized to a designated destination. The figure below shows the KIT structure on the mast cell membrane. As shown below, stem cell factor, or SCF, which is also referred as the c-kit ligand, binds to KIT on the surface of the mast cell, enables signal transduction into the mast cell and activates the KIT-mediated signaling cascade critical to mast cell survival, propagation and differentiation via pathways such as PLCg, JAK2/STAT, PI3K/AKT and RAS/RAF/MEK/ERK.

*KIT (CD117) is the master regulator of mast cell function and survival*




As the master regulator of mast cell function and survival, we believe that the KIT-SCF signaling axis is the optimal intervention point to treat many mast cell mediated diseases. Inhibition of KIT drives both mast cell inactivation and depletion, independent of mast cell activation status.

In a rat model of allergic asthma, THB001 achieved statistically significant reduction in early airway response, correlating with the depletion of mast cells. Consistent with our nonclinical findings, significant clinical and nonclinical data that have been generated by us and by third-party organizations support KIT as an attractive therapeutic target for mast cell regulation. The multi-tyrosine kinase inhibitor imatinib, which is sold under the brand name Gleevec, has been approved by the FDA to treat chronic myelogenous leukemia, acute lymphoblastic leukemia and myelodysplastic syndrome, among other indications. In clinical results by a third party published in *The New England Journal of Medicine*, daily imatinib, which has demonstrated KIT inhibitory activity, achieved a 43% reduction in plasma levels of serum tryptase, a biomarker used to assess mast cell activation, for patients with severe refractory asthma, which resulted in statistically significant improvement in airway hyperresponsiveness at 24 weeks. We believe these results provide compelling clinical proof-of-concept that mast cell reduction may drive meaningful symptomatic relief. Furthermore, an anti-KIT antibody demonstrated compelling clinical responses in patients with chronic inducible urticaria in a Phase 1 clinical trial conducted by a third party.

***Therapeutic Modulation of the Allergic Response***

There are several approved therapeutics used to treat allergy and related inflammatory conditions by targeting specific mediators released by mast cells upon degranulation, including histamines, leukotrienes, cytokines, such as IL-4, IL-5, IL-13, and TNF-a. However, we believe targeting the mast cell directly provides a broader approach to addressing mast cell mediated diseases over only targeting an individual mediator. Due to the involvement of multiple pro-inflammatory mediators, mast cell mediator inhibitors often require use in combination with another treatment modality. As a result, single agent inhibition of individual mast cell mediators, such as the H1 antihistamine, do not provide adequate symptomatic relief to a large proportion of the patient population.

Under current standard of care, patients whose disease does not respond to mediator inhibition, are often candidates for anti-IgE monoclonal antibodies, or mAbs, designed to inhibit IgE-driven mast cell activation. While IgE blockade has demonstrated some clinical benefit in the treatment of a range of mast cell mediated inflammatory disorders, anti-IgE therapy does not fully remedy symptoms for most patients, potentially in part because it does not address IgE-independent pathways of mast cell activation. Omalizumab, the anti-IgE mAb sold under the brand name Xolair, is approved for the treatment of persistent allergic asthma, nasal polyps and chronic spontaneous urticaria. Omalizumab generated an estimated $3.5 billion in 2021 sales worldwide.

Despite current treatment options, there remains a significant unmet need. The targeting of the mast cell directly represents a novel therapeutic approach to address inflammatory diseases. While this approach benefits from clinical validation, advancing the development of therapeutics designed to directly reduce mast cell activity has been thwarted by the potential risk of off-target adverse effects. We believe THB001 has the potential to address this unmet need and enable us to exploit the advantages of mast cell inhibition.

**Overview of Urticaria**

Urticaria, which is also referred to as “hives”, is a common inflammatory disorder that has a lifetime prevalence of up to 25% with females twice as likely to experience the condition as men. Onset peaks between the ages of 20 and 40 years old. It is not a single disease but a reaction pattern that represents cutaneous mast cell degranulation. Mast cell degranulation and the release of vasoactive mediators, primarily histamine, results in extravasation of plasma into the dermis, forming the characteristic hives and edematous pruritic pink wheals of various shape and size.

While the majority of urticaria cases involve acute episodes which are self-limiting and of a short duration, patients with chronic urticaria experience constant or frequently recurring lesions for six or more weeks regularly over months if not years. Chronic urticaria has a negative impact on patients’ quality of life, particularly as the occurrence of angioedema often leads to significant discomfort. Patients have reported an impact on facets of

everyday life that include lack of quality sleep, recreation and social interaction, mobility, rest and work. As such, patients with chronic urticaria frequently exhibit psychiatric comorbidities such as anxiety and depression. At any time, 0.5-1% of the population suffers from chronic urticaria, suggesting a point prevalence of over 1.5 million patients in the United States. Approximately 70% to 80% of patients with urticaria are women. The duration of the disease is generally 1-5 years but is likely to be longer in more severe cases.

Chronic urticaria is comprised of two distinct disease types, inducible urticaria and spontaneous urticaria, which was previously referred to as idiopathic urticaria. Chronic inducible urticaria is caused by exposure to specific triggers, which include excessive cold or heat, the application of pressure and exercise. No underlying cause or underlying disease process has been identified in the majority of patients with chronic spontaneous urticaria. In patients with no identified trigger, the rate of spontaneous remission at 1 year is approximately 20% to 50%, while 30% of moderate to severe patients suffer from chronic urticaria for more than 5 years.

***Current Treatments for Chronic Urticaria***

Current chronic urticaria treatment guidelines recommend first line treatment with second generation H1 antihistamines to provide hive and itch symptom control. For those patients whose symptoms remain uncontrolled following first line therapy, second line treatment is initiated with either elevated doses (up to fourfold) of second generation H1 antihistamines or the addition of another class of agent including first generation H1 antihistamines. For the approximately 50% of chronic spontaneous urticaria patients who remain uncontrolled following second line therapy, Xolair is approved as third line therapy. In clinical trials, Xolair reported complete response rates of approximately 36% in chronic spontaneous urticaria and is estimated to address less than 20% of eligible patients whose symptoms have failed to be controlled by H1 antihistamine therapy. As such, there remains a large population of patients that have unmet need.

**Our Solution: The KIT Inhibitor THB001**

***Summary***

THB001 is a highly potent and selective, small molecule wild-type KIT inhibitor in development for the treatment of mast cell mediated inflammatory diseases. THB001 is designed to offer attractive drug-like properties, including high potency and oral bioavailability, and high selectivity for the wild-type KIT receptor. Based on nonclinical and available clinical data to date, we believe THB001 differentiates from other KIT-targeting therapeutics in the following designed aspects:

- The small molecule modality is anticipated to provide more refined dose titration capabilities than anti-KIT mAbs.
- Oral administration offers improved patient convenience while avoiding mAb-related injection events.
- Higher selectivity for wild-type KIT relative to other small molecule inhibitors. The most potent THB001 off-target effect was against the tyrosine kinase receptor colony stimulating factor 1 with approximately 48-fold selectivity versus KIT when evaluated in a cell-based Ba/F3 assay. Selectivity against platelet-derived growth factor receptor (PDGFR)-a and PDGFR-b was 198- and 106-fold, respectively, in cell-based assays.
- THB001 binds intracellularly to an inactive conformation of KIT, avoiding the risk of paradoxical mast cell activation that can result from a KIT mAb binding to the extracellular portion of the KIT receptor.

In our recently completed Phase 1a clinical trial, THB001 demonstrated dose-dependent reductions of serum tryptase, a key biomarker of mast cell activity which has been shown to correlate with clinical benefit in chronic urticaria patients. We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic

inducible urticaria in May 2022, which has been cleared in the Netherlands and Germany. We initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit a CTA to support initiation of a Phase 1b trial in asthma in the first half of 2023 and expect to report initial data from this trial in the second half of 2024. We intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024. We are also exploring development opportunities across a range of other indications where THB001 may provide benefit to patients suffering from mast cell driven inflammation to demonstrate the "pipeline-in-a-product" potential of THB001.

In addition, we are continuing to optimize the formulation of THB001 from our free base formulation for clinical entry toward a commercial formulation which achieves our target product profile. We have identified a micronized THB001·HCl salt formulation that has demonstrated more favorable solubility, dissolution, manufacturability, and dog pharmacokinetics, or PK, performance over the free base formulation in nonclinical studies. Interim PK data of our THB001·HCl salt formulation in normal healthy volunteers indicates improved exposure per unit dose. We anticipate this improved THB001·HCl salt formulation will enable a QD dosing regimen in future clinical trials.

***Phase 1a Healthy Volunteer Trial Design***

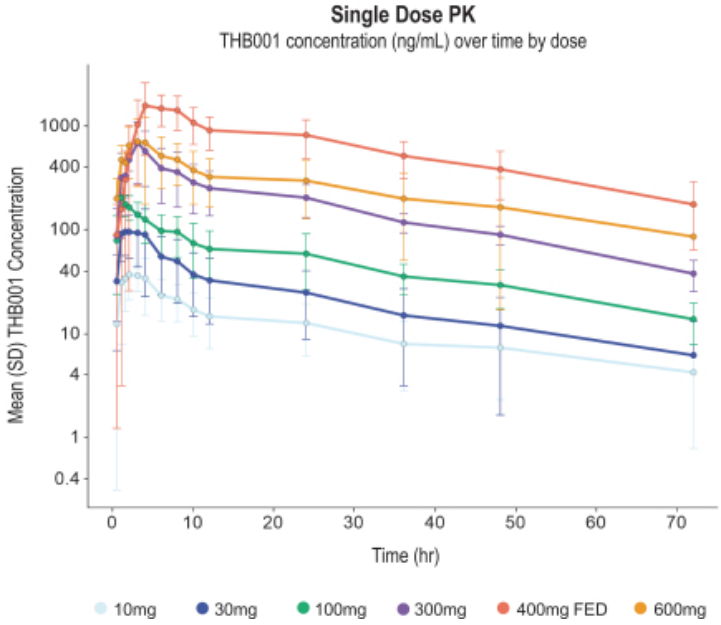
We recently conducted a three-part, 84 subject, Phase 1a clinical trial of THB001 in healthy adult volunteers between the ages of 18 and 65. The primary objective is to evaluate safety and tolerability. Secondary objectives include characterizing pharmacokinetics, including in the presence or absence of food to inform further clinical and drug product formulation development and to measure the pharmacodynamic effect by serum tryptase. The first part of this trial was a single-ascending dose, or SAD, involving five cohorts of up to ten participants assigned to receive a single dose of THB001 or placebo in a 3:1 ratio. Doses ranged from 10 mg to 600 mg across the five cohorts. The second part of the trial was designed to evaluate the effect of food on the pharmacokinetics, or PK, profile of 200 mg THB001. A single 200 mg dose was administered to one cohort of ten participants, half of which received THB001 along with a standardized high-fat breakfast, while the other half received THB001 in a fasted state. Following a washout period of at least 7 days, each participant crossed over to receive THB001 in the alternate fed or fasted state. Safety and tolerability of THB001, together with its PK profile was evaluated during this portion of the trial. Upon completion of this second part of the Phase 1a trial, a sixth SAD cohort was added enabling the evaluation of a 400 mg THB001 dose when administered together with food. The third part of the Phase 1a trial was a multiple ascending dose, or MAD, format of four eight-subject cohorts, administered THB001 over 14 consecutive days. The first cohort received 200 mg of THB001 QD, the second cohort received 200 mg of THB001 BID, the third cohort received 400 mg THB001 BID, and the fourth cohort received 500 mg QD administered with a standardized non-high fat breakfast to further characterize the effect of food on the PK of THB001. A schema of our Phase 1a trial is presented below.

*Schema of our Phase 1a trial in healthy volunteers.*

***Phase 1a Pharmacokinetics, Pharmacodynamics, and Biomarker Data in Healthy Volunteers***

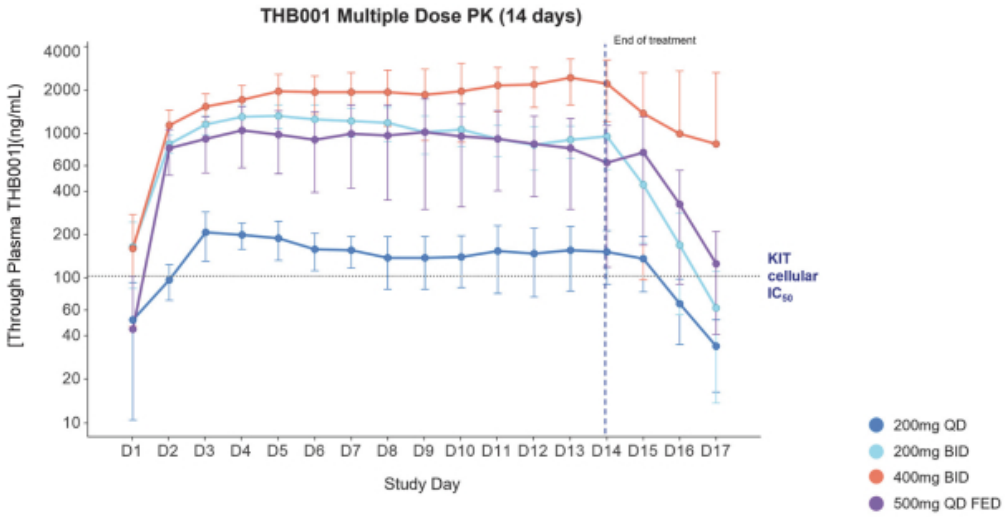
In the SAD portion of the Phase 1a trial, we observed approximately dose proportional increases in serum concentration of THB001 between the 10 mg and 300 mg doses. As reflected in the chart below at 300 mg and higher dosing levels, THB001 concentration exceeded 100 ng/ml through 24 hours, which is the level needed to achieve a KIT half-maximal inhibitory concentration, or $IC_{50}$, between daily doses. This is consistent with the observed mean half-life of THB001 of approximately 24 hours. Administration of THB001 in combination with food was also noted to enhance exposure approximately three-fold.

*SAD pharmacokinetics in doses up to 600 mg*



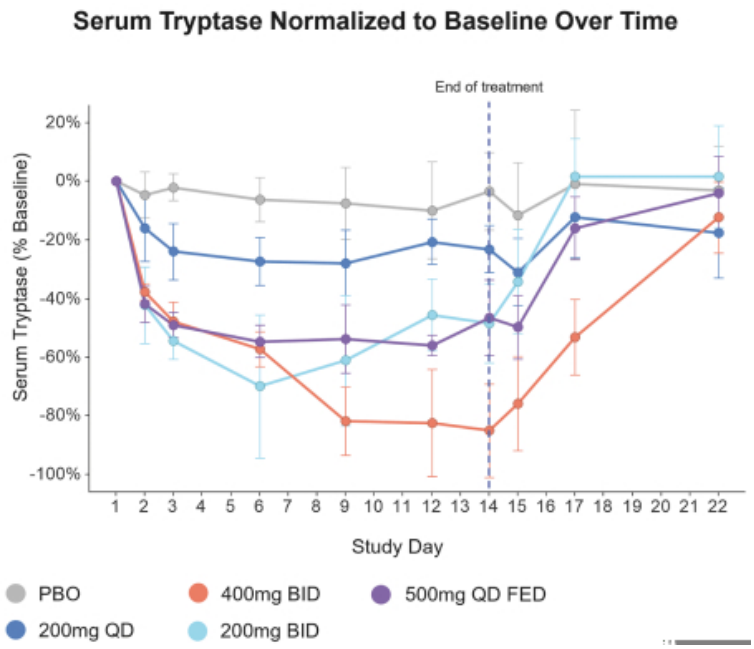

In the MAD portion of the trial, the increase in THB001 dosage from 200 mg BID to 400 mg BID was observed to generate approximately dose proportional increases in THB001 serum concentration levels which provided a trough value difference between THB001 and the protein binding adjusted KIT $IC_{50}$ of approximately 20-fold, which provides evidence of attractive therapeutic exposure. Administration of 500 mg QD with a standardized non-high fat breakfast produced a PK profile that was similar to the 200 mg BID dose administered in the fasted state, confirming the positive effect of food on THB001 exposure.

*200/400 mg BID and 500 mg QD dosing of THB001 generated through serum concentrations which exceeded the $IC_{50}$*



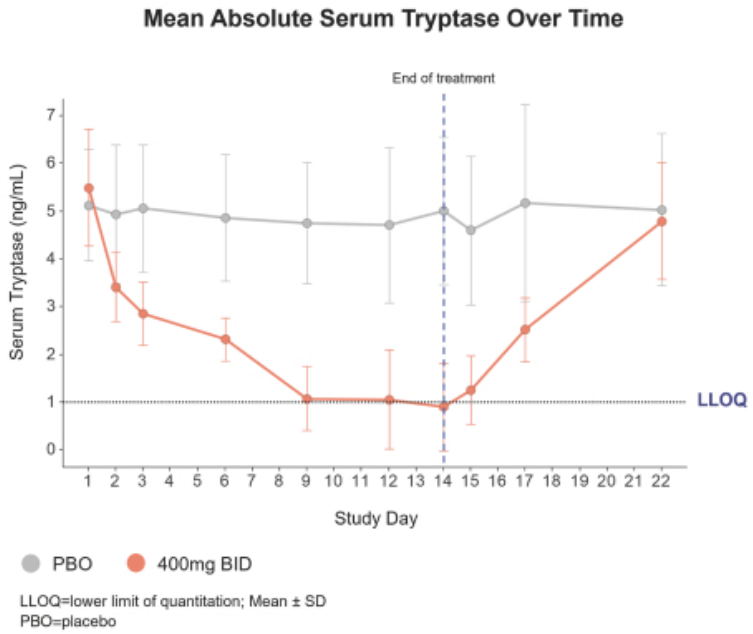

Dose levels of 200 mg per day or greater, given QD or BID, were observed to result in dose dependent declines in serum tryptase concentrations, a key biomarker of mast cell activity which has been demonstrated to correlate with clinical benefit in chronic urticaria, as compared to placebo, or PBO, as reflected in the graph below.

*Twice-daily administration of THB001 resulted in a dose-dependent decrease in serum tryptase levels.*




As reflected in the chart presented below, which shows absolute serum tryptase levels in patients over time, twice daily dosing of the higher 400 mg level of THB001 resulted in mean serum tryptase which was at the lower limit of quantification.

*The higher 400 mg BID dose resulted in a serum tryptase level at the lower limit of quantitation.*




***Phase 1a Safety Data in Healthy Volunteers***

THB001 was well-tolerated at all dose levels administered in the SAD and MAD cohorts in this Phase 1a trial.

In the SAD cohort, no SAEs were observed. Among the AEs recorded, one was categorized as moderate due to a rash and the remaining were characterized as mild in intensity and included headache, fatigue, myalgia and dizziness. Adverse events did not result in any early terminations or subject discontinuation from participation in this portion of the trial. No trial stopping criteria were met and no significant changes or trends in hematology, blood chemistries, vital signs or electrocardiogram, or ECG, measurements were noted. The following table shows all treatment emergent adverse events that were reported by more than two patients.

**SAD/FE Treatment Emergent Adverse Events**

Adverse Events Reported by >2 Subject by Treatment Assignment

| | THB001 | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10mg | | 30mg | | 100mg | | 200mg FED/FAST | | 300mg | | 600mg | | 400mg FED | | PBO | |
| Preferred Term, n % | 6 | % (n) | 6 | % (n) | 5 | % (n) | 10 | % (n) | 4 | % (n) | 5 | % (n) | 6 | % (n) | 10 | % (n) |
| Headache | — | — | — | — | — | — | 5 | 50.0% | — | — | 2 | 40.0% | — | — | — | — |
| Fatigue | | | — | — | 1 | 20.0% | 2 | 20.0% | — | — | — | — | — | — | 1 | 10.0% |
| Myalgia | 1 | 16.7% | — | — | — | — | 1 | 10.0% | — | — | 1 | 20.0% | — | — | — | — |
| Dizziness | 1 | 16.7% | — | — | — | — | — | — | — | — | 2 | 40.0% | — | — | — | — |

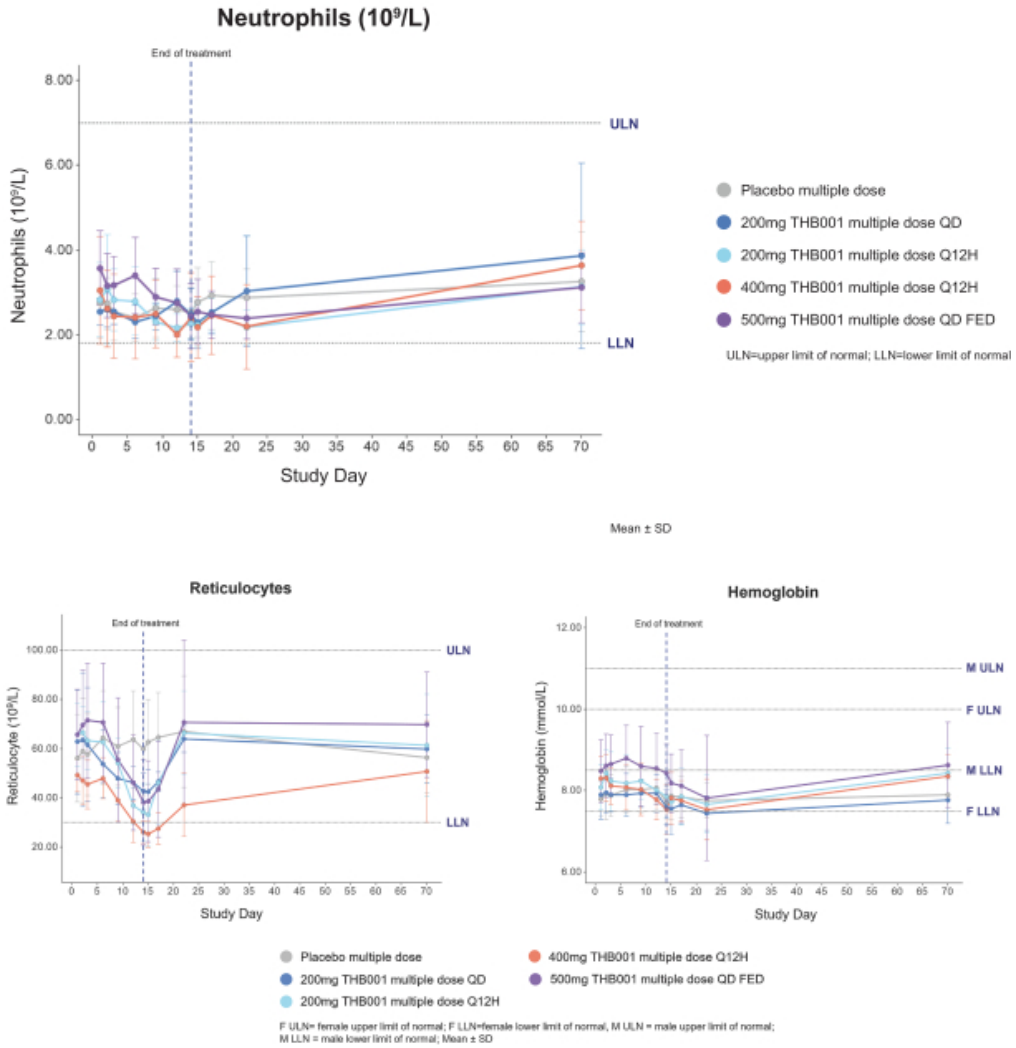
In the MAD portion of the Phase 1a trial, no SAEs were observed. Among the AEs recorded, three were categorized as moderate and the remaining categorized as mild. Among the three AEs characterized as moderate, two AEs were determined to have been unlikely to be related to or unrelated to THB001. The treatment related moderate AE was low neutrophil levels, which resolved after discontinuation in the trial. This subject was subsequently determined to have a neutrophil count below the lower range limit prior to entering the trial. AEs reported as mild included change in hair color, headache, nausea, diarrhea, dizziness, COVID-19, gastric reflux, nasopharyngitis and skin irritation, and one subject experiencing a mild AE discontinued the Phase 1a trial on day twelve due to anxiety. As in the SAD portion of the trial, no trial stop criteria were encountered and no clinically relevant changes or trends in hematology, blood chemistries, vital signs or ECG measurements were observed. The following table shows all treatment emergent adverse events that were reported by more than two patients.

**MAD Treatment Emergent Adverse Events**

Adverse Events Reported by Treatment Assignment in >2 Subjects

| | THB001 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 200mg QD | | 200mg BID | | 400mg BID | | 500mg QD FED | | PBO | |
| Preferred Term, n % | 6 | % of (n) | 6 | % of (n) | 6 | % of (n) | 6 | % of (n) | 8 | % of (n) |
| Hair Color Changes | 2 | 33.3% | 6 | 100.0% | 5 | 83.3% | 4 | 66.7% | — | — |
| Headache | 2 | 33.3% | 2 | 33.3% | 2 | 33.3% | 4 | 66.7% | 3 | 37.5% |
| Nausea | 1 | 16.7% | 2 | 33.3% | — | — | 2 | 33.3% | 2 | 25.0% |
| Diarrhea | 1 | 16.7% | 1 | 16.7% | — | — | 1 | 16.7% | 2 | 25.0% |
| Dizziness | — | — | 1 | 16.7% | — | — | 4 | 66.7% | 1 | 12.5% |
| COVID-19 | 1 | 16.7% | — | — | — | — | 2 | 33.3% | — | — |
| Gastric reflux | — | — | 1 | 16.7% | 1 | 16.7% | — | — | 1 | 12.5% |
| Nasopharyngitis | 1 | 16.7% | — | — | 2 | 33.3% | — | — | — | — |
| Skin Irritation | — | — | — | — | 1 | 16.7% | 1 | 16.7% | 1 | 12.5% |

As reflected in the charts below, neutrophil declines were initially observed, but stabilized, and the average values remained above the lower limit of normal through day 14. In addition, declines in reticulocytes were observed, a pre-cursor cell to red blood cells; however, these declines did not manifest into any clinically meaningful adverse events and did not translate into hemoglobin levels below the lower limit of normal, which is a key clinical measure given hemoglobin is a protein in red blood cells that carries oxygen to tissues throughout the body. We believe compensatory mechanisms, such as erythropoietin signaling, mitigate the effects of KIT inhibition.




***Nonclinical Safety Pharmacology and Toxicology***

A standard battery of nonclinical central nervous system, cardiovascular and respiratory safety pharmacology studies have been completed with THB001 with no findings anticipated to be of clinical relevance. Genotoxicity assessments conducted according to International Conference on Harmonization, or ICH, guidance were negative as were tests for photoirradiation potential.

The nonclinical toxicology profile of THB001 has been demonstrated to be on-target with evidence of reversibility. Repeat dose GLP toxicology studies of up to 13 weeks of continuous dosing or 14 weeks of episodic dosing have been completed with THB001 in both rats and dogs. As expected and consistent with KIT function, dose related on-target histopathologic observations were noted in spermatogenesis, hematology and hair pigmentation. Either partial or complete reversibility was established during the recovery periods for these findings consistent with the growth kinetics of affected cells. We believe these effects will be completely reversible with sufficient recovery periods.

Species difference in the hematologic effects of inhibition or genetic loss of function of KIT have been reported with rodents and dogs being relatively more sensitive than monkeys and humans. For example, the disproportionate sensitivity of mice relative to humans has been mechanistically attributed to the lack the compensatory expression of the receptor tyrosine kinase FLT3 in mice during different stages of hematopoietic stem cell differentiation.

In nonclinical animal models of allergic disease, THB001 showed dose-dependent reductions in tissue mast cells correlating with efficacy in rat models of dermal anaphylaxis (28 day passive cutaneous anaphylaxis) and asthma (9 day ovalbumin induced early airway response). Trough levels of THB001 in these studies were consistent with levels achieved during our Phase 1a healthy volunteer trial.

As expected based on the role of KIT in fetal development, an initial embryo fetal development study of THB001 in rats has shown evidence for teratogenicity. We have initiated a development and reproductive toxicology, or DART, program and intend to conduct genotoxicity assessments in accordance with ICH guidelines. We believe that the administration of THB001 in women of childbearing potential will require the concomitant use of appropriate birth control measures.

We believe these studies support the planned Phase 1b trial in CIndU, regulatory filing for asthma and further clinical development of THB001. We have initiated the chronic toxicology of 26 weeks in rats and 39 weeks in dogs required to continue dosing beyond 13 weeks in Phase 2.

***Our Planned Phase 1b Trial in Chronic Inducible Urticaria***

We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, which has been cleared in the Netherlands and Germany. We initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. Chronic inducible urticaria is caused by exposure to excessive cold or heat, the application of pressure and exercise, among other triggers. Accordingly, there is an inherent ability to induce the disease state in the clinical setting, similar to real world triggering situations, in a predictable and controlled manner through provocation testing. We believe that chronic inducible urticaria represents an attractive initial clinical indication for THB001 as a precursor for chronic spontaneous urticaria, given the ability to efficiently evaluate clinical activity outcomes through provocation testing, in concert with biomarker measures of mast activity and safety data.

The planned Phase 1b trial is expected to enroll 30 patients to evaluate three dose levels over twelve weeks of treatment. The primary objective is to evaluate safety and tolerability, primarily by mean reduction in critical temperature threshold. Secondary objectives include characterizing pharmacokinetics, measuring the pharmacodynamic effect by serum tryptase as well as clinical outcome measures.

We plan to seek regulatory approval to commercialize THB001 or any future product candidates in the United States, the European Union and in selected foreign countries, including the United Kingdom and Japan.

***"Pipeline-in-a-Product" Potential of THB001***

Dysfunctional mast cell activity has been implicated in the pathophysiology of a broad range of allergic and other inflammatory disorders that impact the skin, eye, respiratory tract and gastrointestinal tract. Given KIT is

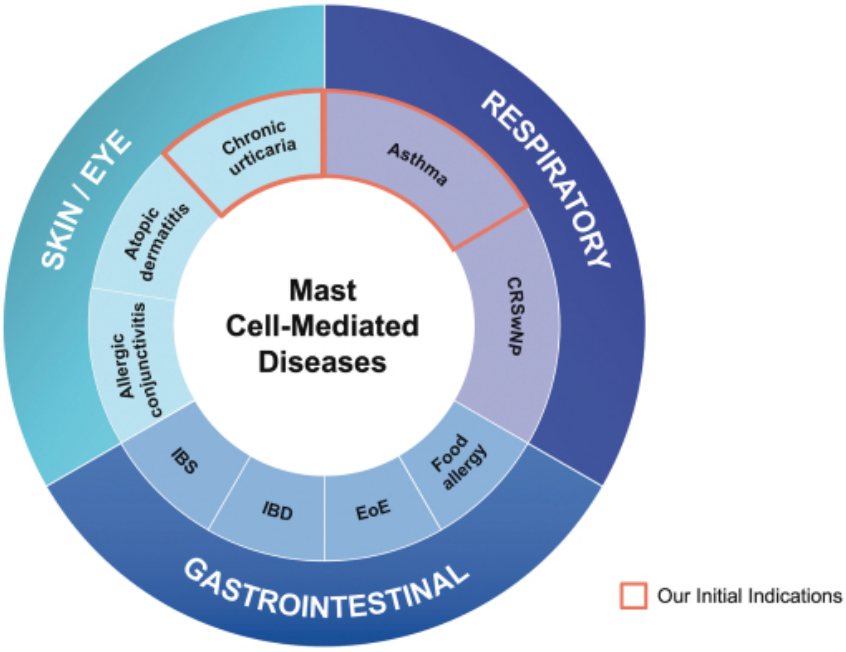
the master regulator of mast cell function and survival, we believe that KIT inhibition is the optimal approach to treat many of these mast cell mediated diseases. As such, we believe THB001 represents a "pipeline-in-a-product" opportunity.

Related to the skin and eye, potential indications addressable with KIT inhibition include chronic urticaria, systemic sclerosis, atopic dermatitis and allergic conjunctivitis. We submitted a CTA in Europe for our dose escalation Phase 1b proof-of-concept trial in chronic inducible urticaria in May 2022, which has been cleared in the Netherlands and Germany. We initiated the trial in September 2022, and expect to report initial data from this trial in the second half of 2023. We also intend to submit both a CTA in Europe and an IND in the United States to support initiation of a Phase 2 trial in chronic spontaneous urticaria in the first half of 2024.

In the respiratory tract, potential indications addressable with KIT inhibition include asthma and chronic rhinosinusitis with nasal polyposis, or CRSwNP. We intend to submit for regulatory clearance to initiate a Phase 1b trial for asthma in the first half of 2023, and expect to report initial data from this trial in the second half of 2024. We intend to conduct the planned Phase 1b trial as a parallel, placebo-controlled dose-escalation trial involving mild, stable, allergic asthmatic subjects who are not on regular anti-inflammatory treatment. The primary objective is to evaluate the change from baseline in forced expiratory volume during late asthmatic response by measuring forced expiratory volume, with additional secondary biomarker and clinical measurements as secondary endpoints.

In the gastrointestinal tract, potential indications addressable with KIT inhibition include irritable bowel syndrome, or IBS, inflammatory bowel disease, or IBD, eosinophilic esophagitis and food allergy.

*Examples of selected mast cell mediated diseases potentially addressable with KIT inhibition*

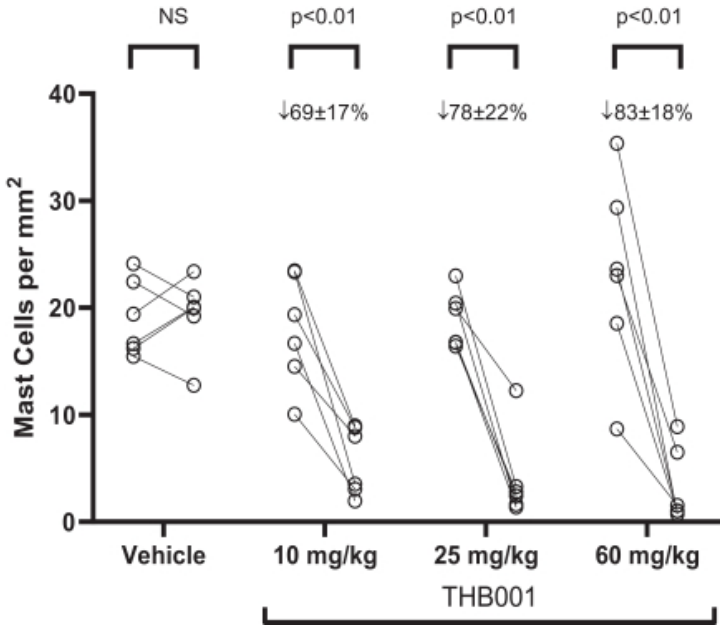


***THB001's Therapeutic Potential in Other Mast Cell Driven Inflammatory and Allergic Diseases***

Nonclinical studies of THB001 provide evidence of its ability to deplete and inhibit mast cell activity in multiple species and tissue types. Significant therapeutic improvement has also been observed in animal disease models.

In a 14-day repeat dose study of THB001 conducted in dogs, samples were collected from the skin both before and after administration of the drug candidate and evaluated for mast cell counts. As is reflected in the results presented below, we observed a dose-dependent decline in mean skin mast cell count in every treated animal. Statistical significance is important and when used herein is denoted by p-values. The p-value is the probability that the reported result was achieved purely by chance (for example, a p-value < 0.001 means that there is a less than 0.1% chance that the observed change was purely due to chance). Generally, a p-value less than 0.05 is considered to be statistically significant.

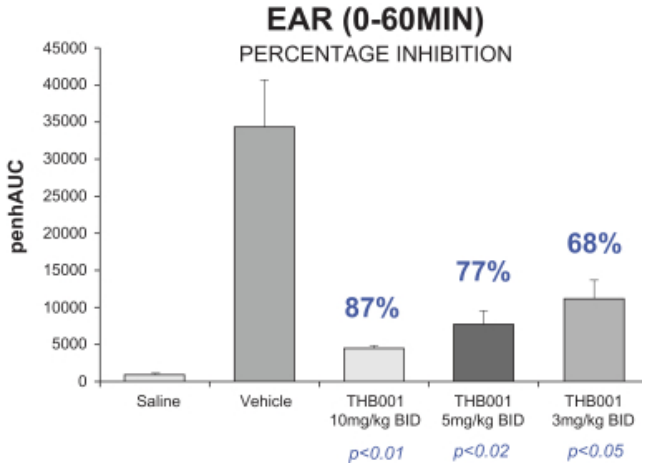
*THB001 generated dose-dependent mast cell depletion in a 14-day repeat dose study in dogs.*




In a rat model of allergic asthma conducted by Novartis, THB001 also demonstrated robust *in vivo* activity, with improvements in early airway response, or EAR, and reduction in the lung mast cell specific gene signature by approximately 50% or greater. The degranulation of mast cells is the main contributor in the early phase allergic response upon antigen exposure and accordingly, inhibition of mast cell survival and function by prevention of KIT activation is expected to result in the improvement of allergic symptoms.

In this study, animals received OVA antigen to stimulate allergic reaction in the lung with the exception of one cohort receiving saline. The OVA antigen treated animals were administered either a 3 mg/kg, or mpk, 5 mpk or 10 mpk dose of THB001 twice daily for seven days and compared to animals administered vehicle alone. As is reflected in the experimental results presented in the chart below, THB001 produced a dose dependent, statistically significant therapeutic response, with measures of lung function enhanced pause, or Penh, used to assess changes in the shape of airflow pattern entering and leaving the animal, displaying notable improvement with increased KIT inhibition. Moreover, at the lowest level administered to the animals, 3 mg/kg BID, the serum concentration of THB001 exceeded the *in vitro* protein binding adjusted KIT $IC_{50}$ over the dosing period, providing evidence of adequate sustained suppression of KIT-mediated signaling activity.

*The use of THB001 produced statistically significant airway improvements in a rat model of allergic asthma.*




Gene expression profiles provided further support of THB001's inhibition of mast cell activity. Expression patterns for mast cell associated genes were evaluated after administration of the various dose levels of THB001 relative to expression levels observed after dosing with vehicle. These expression profiles revealed that at approximately one-half the expression levels seen after administration of vehicle, which was achieved at the lower dosing level of 3 mpk, the animals began to benefit from significant airway improvement. These results suggest that modulation to some intermediate inhibitory level that is less than complete inhibition of mast cell activity may provide meaningful clinical benefit. The analysis of the gene expression profiles is outlined in the chart below.

*Mast cell-associated gene expression is suppressed in the presence of THB001.*

**Percentage of Vehicle Response**

| Treatment | Challenge | Cpa3 | FceR1a | Mcpt2 | Mcpt9 |
|---|---|---|---|---|---|
| None | Saline | 68 | 80 | 55 | 76 |
| Vehicle | OVA | 100 | 100 | 100 | 100 |
| 3 mg/kg THB001 (BID) | OVA | 44 | 38 | 46 | 50 |
| 5 mg/kg THB001 (BID) | OVA | 41 | 38 | 47 | 54 |
| 10 mg/kg THB001 (BID) | OVA | 24 | 21 | 28 | 29 |

Abbreviations: BID=twice daily; Cpa3=carboxypeptidase 3; FceR1a=Fc epsilon receptor 1 alpha chain; Mcpt2=Mast cell tryptase 2; Mcpt9=Mast cell tryptase 9; OVA=ovalbumin.

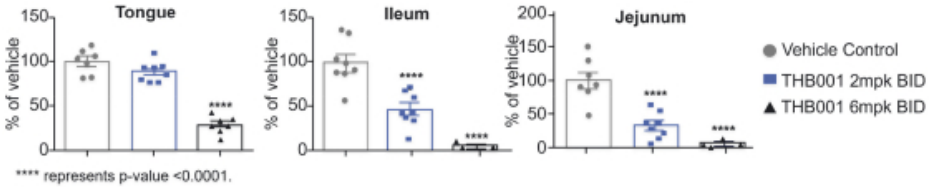
***The Therapeutic Benefit of THB001 May Extend to a Range of Tissues***

We are also exploring development opportunities across a range of other indications where THB001 may provide benefit to patients suffering from mast cell driven inflammation. We believe that KIT inhibition may provide wide therapeutic utility across other indications as mast cells are present in numerous tissue types with external exposures. In addition to skin, where chronic urticaria represents our initial clinical indication, there are multiple respiratory and gastrointestinal conditions including eosinophilic esophagitis and asthma, where we believe mast cells maintain a vital role in driving the pathophysiology of the disease. We believe these potential additional opportunities represent attractive markets with established development and regulatory pathways, for which there remains a large unmet need.

For example, approximately five to ten percent of asthma patients suffer from severe asthma, or an estimated 750,000 to one million patients in the United States alone.

In a nine-day repeat dose rat pharmacology study, THB001 demonstrated the ability to potently deplete mast cells across all tissues tested. As is noted in the chart below, in tissue taken from the oral cavity (tongue tissue) and the small intestine (ileum and jejunum tissue), there was statistically significant mast cell suppression following administration of THB001.

*THB001 demonstrated mass cell depletion across a range of tissue types.*




**Licenses, Partnerships and Collaborations**

***License Agreement with Novartis International Pharmaceutical Ltd.***

On June 28, 2019, we entered into a license agreement with Novartis International Pharmaceutical Ltd. (which subsequently merged into the company Novartis Pharma AG), or Novartis, as amended, or the Novartis Agreement. Pursuant to the Novartis Agreement, Novartis granted us an exclusive, worldwide, sublicensable (subject to certain requirements therein) license under specified patent rights and know-how related to three licensed compounds to develop, make, use and sell certain products incorporating or comprising a licensed compound, including THB001, or the Licensed Products. Under the Novartis Agreement, we are solely responsible for all research, development, regulatory and commercialization activities related to the Licensed Products. We are required to use commercially reasonable efforts to develop and seek regulatory approval for, and commercialize, at least one Licensed Product in the United States, France, Germany, Italy, Spain, the United Kingdom and Japan.

Pursuant to the Novartis Agreement, we made a one-time payment of $350,000 to Novartis and agreed to issue shares of preferred stock pursuant to that certain Investment Letter dated as of June 27, 2019, or the Novartis Investment Letter. Pursuant to the Novartis Investment Letter, we have issued Novartis 5,970,000 shares of Series A-1 Preferred Stock, consisting of shares issued as part of entering into the agreement and shares issued subsequently under the anti-dilution right included within the license agreement. As of June 30, 2022 all of the Company's obligations under the anti-dilution right have been fulfilled. Further, we are obligated to pay Novartis up to an aggregate of (a) $31.7 million upon the achievement of certain specified development milestones for the Licensed Products and (b) $200.0 million upon the achievement of certain specified sales and commercialization milestones with respect to the Licensed Products. We are also required to pay Novartis, on a Licensed Product-by-Licensed Product and country-by-country basis, tiered royalties in the single-digit percentage range on annual net sales of Licensed Products, subject to reduction and offset upon certain specified events. The foregoing royalty payment obligations will expire on the latest to occur of: (i) expiration of the last valid claim of the licensed patent rights that covers such Licensed Product in such country; (ii) the expiration of any regulatory exclusivity for such Licensed Product in such country; and (iii) ten years following the first commercial sale of such Licensed Product in such country. Upon the expiration of such royalty term in a particular country for a particular Licensed Product, the license granted to us with respect to such Licensed Product in such country will become fully paid-up, royalty-free, transferable, perpetual and irrevocable.

The Novartis Agreement will expire (a) on a Licensed Product-by-Licensed Product and country-by-country basis, upon expiration of the royalty term for such Licensed Product in such country and (b) in its entirety upon

the expiration of the royalty term with respect to the last Licensed Product being developed, manufactured or commercialized worldwide. Each party may terminate the Novartis Agreement for uncured material breach by the other party or in the case of the other party's insolvency. Additionally, we have the right to terminate the Novartis Agreement for convenience upon 90 days' prior written notice to Novartis. Upon termination of the Novartis Agreement by us for convenience or by Novartis for our uncured material breach or insolvency, the license granted to us by Novartis will terminate and we will be obligated to, (i) grant to Novartis an exclusive, worldwide, reversion license under certain patent rights and know-how with respect to the terminated Licensed Products, (ii) transfer to Novartis certain know-how and regulatory documentation with respect to the terminated Licensed Products and (iii) to the extent applicable, use commercially reasonable efforts to transfer agreements between us and third parties that are solely related to the terminated licensed compounds and Licensed Products.

**Manufacturing**

We oversee and manage third party Contract Development and Manufacturing Organizations, or CDMOs, to support development and manufacture of THB001 for our clinical trials.

We currently use two geographically-distributed CDMOs to supply our GMP drug substance. The manufacturing process is robust with readily-sourced commercially available raw materials and straightforward scalability. The drug substance demonstrates excellent room temperature stability, and all batch releases have met all phase-appropriate specifications.

We use three geographically-distributed CDMOs for drug product manufacturing. The THB001 drug product is a cost-effective and readily scaled solid oral dosage form in standard gelatin capsules. More than 100,000 capsules have been produced to date, which meet all release specifications. Excellent room temperature stability has been established for the THB001 drug product.

We expect to enter into commercial supply agreements with commercial manufacturers prior to any potential approval of THB001. We continue to develop a commercial route for THB001 manufacture in alignment with our program timeline. We believe our current manufacturers are able to supply the upcoming clinical trials and additional CDMOs may be on-boarded at later stages of clinical and commercial development.

**Competition**

We face substantial competition from multiple sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions and governmental agencies and public and private research institutions. Our competitors compete with us on the level of the technologies employed, or on the level of development of product candidates. In addition, many small biotechnology companies have formed collaborations with large, established companies to (i) obtain support for their research, development and commercialization of products or (ii) combine several treatment approaches to develop longer lasting or more efficacious treatments that may potentially directly compete with our current or future product candidates. We anticipate that we will continue to face increasing competition as new therapies and combinations thereof, technologies, and data emerge within the field of immunology and, furthermore, within the treatment of allergic and inflammatory conditions.

In addition to the current standard of care treatments for patients with allergic and inflammatory diseases, numerous commercial and academic nonclinical studies and clinical trials are being undertaken by a large number of parties to assess novel technologies and product candidates. There are numerous other competitive approaches, including inhibitors of activators of mast cells such as IgE antibodies like omalizumab, inhibitors of mediators such as anti-histamines and anti-IL-4 /IL-13 therapies, other small molecule approaches such as Bruton's tyrosine kinase inhibitors, and other small molecule and biologic KIT inhibitors, including Celldex's CDX-0159, a monoclonal antibody KIT inhibitor, among others.

Many of our competitors, either alone or in combination with their respective strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, the regulatory approval process, and marketing than we do. Mergers and acquisition activity in the pharmaceutical, biopharmaceutical and biotechnology sector is likely to result in greater resource concentration among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through sizeable collaborative arrangements with established companies. These competitors also compete with us in recruiting and retain qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if one or more of our competitors develop and commercialize products that are safer, more effective, better tolerated, or of greater convenience or economic benefit than our proposed product offering. Our competitors also may be in a position to obtain FDA or other regulatory approval for their products more rapidly, resulting in a stronger or dominant market position before we are able to enter the market. The key competitive factors affecting the success of all of our programs are likely to be product safety, efficacy, convenience and treatment cost.

**Intellectual Property**

Intellectual property is of vital importance in our field and in biotechnology generally. We seek to protect and enhance proprietary technology, inventions and improvements that are commercially important to the development of our business by seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position. We will also seek to rely on regulatory protection afforded through inclusion in expedited development and review, data exclusivity, market exclusivity and patent term extensions where available.

As with other biotechnology and pharmaceutical companies, our commercial success will depend in part on obtaining and maintaining patent protection of our current and future product candidates and the methods used to develop and manufacture them, as well as successfully defending any such patents against third-party challenges and operating without infringing on the proprietary rights of others. Our ability to stop third parties from making, using, selling, offering to sell or importing our product candidates will depend on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities. We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any patents that may be granted to us in the future will be commercially useful in protecting our product candidates, discovery programs and processes. For this and more comprehensive risks related to our intellectual property, see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

The terms of individual patents depend upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, including the United States, the patent term is 20 years from the earliest date of filing a non-provisional patent application. In the United States, a patent’s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office, or USPTO, in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent. In the United States, the term of a patent that covers an FDA-approved drug may also be eligible for extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the subject drug candidate is under regulatory review. 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 applicable to an approved drug 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. Similar provisions to extend the term of a

patent that covers an approved drug are available in Europe and other foreign jurisdictions. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We plan to seek patent term extensions to any issued patents we may obtain in any jurisdiction where such patent term extensions are available, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment that such extensions should be granted, and if granted, the length of such extensions. For more information regarding the risks related to our intellectual property, see the section titled "Risk Factors—Risks Related to Our Intellectual Property."

In some instances, we have submitted and expect to submit patent applications directly to the USPTO as provisional patent applications. Corresponding non-provisional patent applications must be filed not later than 12 months after the provisional application filing date. While we intend to timely file non-provisional patent applications relating to our provisional patent applications, we cannot predict whether any such patent applications will result in the issuance of patents that provide us with any competitive advantage.

We file U.S. non-provisional applications and Patent Cooperation Treaty, or PCT, applications that claim the benefit of the priority date of earlier filed provisional applications, when applicable. The PCT system allows a single application to be filed within 12 months of the original priority date of the patent application, and to designate all of the PCT member states in which national patent applications can later be pursued based on the international patent application filed under the PCT. The PCT searching authority performs a patentability search and issues a non-binding patentability opinion which can be used to evaluate the chances of success for the national applications in foreign countries prior to having to incur the filing fees. Although a PCT application does not issue as a patent, it allows the applicant to seek protection in any of the member states through national-phase applications. At the end of the period of two and a half years from the first priority date of the patent application, separate patent applications can be pursued in any of the PCT member states either by direct national filing or, in some cases by filing through a regional patent organization, such as the European Patent Office. The PCT system delays expenses, allows a limited evaluation of the chances of success for national/regional patent applications and enables substantial savings where applications are abandoned within the first two and a half years of filing.

For all patent applications, we determine claiming strategy on a case-by-case basis. Advice of counsel and our business model and needs are always considered. We seek to file patents containing claims for protection of useful applications of our proprietary technologies and any products, as well as all new applications and/or uses we discover for existing technologies and products, assuming these are strategically valuable. We continuously reassess the number and type of patent applications, as well as the pending and issued patent claims to pursue maximum coverage and value for our processes, and compositions, given existing patent office rules and regulations. Further, claims may be modified during patent prosecution to meet our intellectual property and business needs.

The ability to obtain patent protection and the degree of such protection depends on a number of factors, including the extent of the prior art, the novelty and non-obviousness of the invention, and the ability to satisfy the enablement requirement of the patent laws. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted or further altered even after patent issuance. Consequently, we may not obtain or maintain adequate patent protection for any of our future product candidates or for our technology platform. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties.

In addition to patent protection, we also rely on trademark registration, trade secrets, know how, other proprietary information and continuing technological innovation to develop and maintain our competitive position. We seek to protect and maintain the confidentiality of proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our

employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. Our agreements with employees also provide that all inventions conceived by the employee in the course of employment with us or from the employee's use of our confidential information are our exclusive property. However, such confidentiality agreements and invention assignment agreements can be breached and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our consultants, contractors or collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting trade secrets, know-how and inventions. For more information regarding the risks related to our intellectual property, see the section titled "Risk Factors—Risks Related to Intellectual Property."

The patent positions of biotechnology companies like ours are generally uncertain and involve complex legal, scientific and factual questions. Our commercial success will also depend in part on not infringing upon the proprietary rights of third parties. Third-party patents could require us to alter our development or commercial strategies, or our products or processes, obtain licenses or cease certain activities. Our breach of any license agreements or our failure to obtain a license to proprietary rights required to develop or commercialize our future products may have a material adverse impact on us. If third parties prepare and file patent applications in the United States that also claim technology to which we have rights, we may have to participate in interference or derivation proceedings in the USPTO to determine priority of invention. For more information, see the section titled "Risk Factors—Risks Related to Intellectual Property."

When available to expand market exclusivity, our strategy is to obtain, or license additional intellectual property related to current or contemplated development platforms, core elements of technology and/or clinical candidates.

As of June 30, 2022, our overall patent portfolio contained eight patent families that collectively contain issued patents, pending provisional and non-provisional U.S. patent applications, PCT international patent applications, and pending patent applications in foreign jurisdictions. The patents and patent applications have claims relating to our current product candidate THB001, pharmaceutical compositions, methods of use, as well as claims directed to other KIT inhibitor compounds.

*THB001*

As of June 30, 2022, we exclusively licensed from Novartis a first patent family to THB001 containing patents and patent applications directed to compositions of matter and methods of use. This first patent family contains one patent in the United States, 67 patents, collectively, in Europe, Japan, Australia, Canada, China, Mexico and other foreign countries, as well as over six patent applications pending, collectively, in India, Thailand and other foreign countries. These U.S. and foreign patents, and any further foreign patents that may issue from these pending foreign patent applications, if granted and all appropriate maintenance fees paid, are expected to expire in 2032, not including any patent term adjustment, patent term extension, or SPC.

As of June 30, 2022, we exclusively licensed from Novartis one patent family and solely own another patent family, each directed to certain physical forms of THB001 and having patent applications to compositions of matter and methods of use. The patent family that we exclusively license to certain physical forms of THB001 contains 16 patent applications, collectively, in the United States, Europe, Japan, Australia, Canada, China, Mexico and other foreign countries. Any U.S. or foreign patents that issue from these exclusively licensed patent

applications, if granted and all appropriate maintenance fees paid, are expected to expire in year 2040, not including any patent term adjustment, patent term extension, or SPC. Our solely owned patent family directed to certain physical forms of THB001 contains one pending international patent application and one pending U.S. patent application. Any U.S. or foreign patents that issue from these solely owned patent applications, if granted and all appropriate maintenance fees paid, are expected to expire in year 2041, not including any patent term adjustment, patent term extension, or SPC.

As of June 30, 2022, we exclusively licensed from Novartis one patent family and solely own another patent family, each directed to certain pharmaceutical compositions containing THB001 and having patent applications to compositions of matter and methods of use. The patent family that we exclusively license to certain pharmaceutical compositions containing THB001 contains one pending international patent application, one pending U.S. patent application, and one pending patent application in Taiwan, whereby any U.S. or foreign patents that issue based on these exclusively licensed patent applications, if granted and all appropriate maintenance fees paid, are expected to expire in year 2041, not including any patent term adjustment, patent term extension, or SPC. Our solely owned patent family directed to pharmaceutical compositions containing THB001 contains one pending international patent application, one pending U.S. patent application, and one pending patent application in Taiwan, whereby any U.S. or foreign patents that issue based on these solely owned patent applications, if granted and all appropriate maintenance fees paid, are expected to expire in year 2041, not including any patent term adjustment, patent term extension, or SPC.

As of June 30, 2022, we solely owned one pending international patent application directed to methods of treatment using THB001 according to particular dosing protocols. Any U.S. or foreign patents that issue from a national phase patent application filed based on this international application, if granted and all appropriate maintenance fees paid, are expected to expire in year 2042, not including any patent term adjustment, patent term extension, or SPC. Additionally, as of June 30, 2022, we solely owned one pending U.S. provisional application directed to methods of treating certain indications using THB001. Any U.S. or foreign patents that issue from an application claiming priority to this provisional application, if granted and all appropriate maintenance fees paid, are expected to expire in the year 2043, not including any patent term adjustment, patent term extension, or SPC.

*Additional KIT Inhibitor Compounds*

As of June 30, 2022, we exclusively licensed one patent family from Novartis to additional KIT inhibitor compounds containing patents and patent applications directed to compositions of matter and methods of use. This patent family contains three patents in the United States, 21 patents, collectively, in Europe, Japan, Canada, China, Mexico and other foreign countries, as well as one patent application pending in India and two patent applications pending in Brazil. These U.S. and foreign patents, and any further foreign patents that may issue from these pending foreign patent applications, if granted and all appropriate maintenance fees paid, are expected to expire in 2032, not including any patent term adjustment, patent term extension, or SPC.

**Government Regulation**

***Regulation Within the United States***

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

***FDA Approval Process***

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act, or FDC Act, and other federal and state statutes and regulations govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications, or NDAs, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

Pharmaceutical product development for a new product or certain changes to an approved product in the U.S. typically involves nonclinical laboratory and animal tests, the submission to the FDA of an IND, which must become effective before clinical testing may commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease.

Nonclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the nonclinical tests must comply with federal regulations and requirements, including good laboratory practices. The results of nonclinical testing are submitted to the FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long-term nonclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted. A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin. Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal regulations; (ii) in compliance with good clinical practice, or GCP, an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors; as well as (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board, or IRB, and ethics committee for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1a, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence of effectiveness. Phase 2 usually involves trials in a limited patient population to determine the effectiveness of the drug for a particular indication, dosage tolerance and optimum dosage, and to identify common adverse effects and safety risks. If a drug demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug. In most cases, the FDA requires two

adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 trial may be sufficient in rare instances, including: (i) where the study is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible; or (ii) when in conjunction with other confirmatory evidence.

The manufacturer of an investigational drug in a Phase 2 or 3 clinical trial for a serious or life-threatening disease is required to make available, such as by posting on its website, its policy on evaluating and responding to requests for expanded access.

After completion of the required clinical testing, an NDA is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the U.S. The NDA must include the results of all nonclinical, clinical and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture and controls. The cost of preparing and submitting an NDA is substantial. The submission of most NDAs is additionally subject to a substantial application user fee, and the applicant under an approved NDA is also subject to an annual program fees for each prescription product. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be filed based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is filed, the FDA begins an in-depth review. FDA has agreed to certain performance goals in the review of NDAs to encourage timeliness. Most applications for standard review drug products are reviewed within ten to twelve months of the date of submission of the NDA to the FDA; most applications for priority review drugs are reviewed in six to eight months of the date of submission of the NDA to the FDA. Priority review can be applied to drugs that the FDA determines offer major advances in treatment or provide a treatment where no adequate therapy exists. The review process for both standard and priority review may be extended by the FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

The FDA may also refer applications for novel drug products, or drug products that present difficult questions of safety or efficacy, to an outside advisory committee—typically a panel that includes clinicians and other experts—for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations.

Before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. The FDA will not approve the product unless compliance with current good manufacturing practices, or cGMPs, is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or

certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

***Disclosure of Clinical Trial Information***

Sponsors of clinical trials of FDA regulated products, including drugs, are required to register and disclose certain clinical trial information. Information related to the product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed in certain circumstances for up to two years after the date of completion of the trial. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

***Pediatric Information***

Under the Pediatric Research Equity Act, or PREA, NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. FDA may grant full or partial waivers, or deferrals, for submission of data. With certain exceptions, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The Best Pharmaceuticals for Children Act, or BPCA, provides NDA holders a six-month extension of any exclusivity—patent or nonpatent—for a drug if certain conditions are met. Conditions for exclusivity include FDA's determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, FDA making a written request for pediatric studies, and the applicant agreeing to perform, and reporting on, the requested studies within the statutory timeframe. Applications under the BPCA are treated as priority applications, with all of the benefits that designation confers.

***Post-Approval Requirements***

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, the FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling.

Adverse event reporting and submission of periodic reports are required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, REMS and surveillance to monitor the effects of an approved product, or FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality control, drug manufacture, packaging and labeling procedures must continue to conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration with the FDA subjects entities to periodic unannounced inspections by the FDA, during which the FDA inspects

manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

***The Hatch-Waxman Amendments***

*Orange Book Listing*

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application, or ANDA. An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. Other than the requirement for bioequivalence testing, ANDA applicants are not required to conduct, or submit results of, nonclinical or clinical tests to prove the safety or effectiveness of their drug product. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug and can often be substituted by pharmacists under prescriptions written for the original listed drug pursuant to each state's laws on drug substitution.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. The ANDA applicant may also elect to submit a section viii statement certifying that its proposed ANDA label does not contain (or carve out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent. If the applicant does not challenge the listed patents, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired. A certification that the new product will not infringe the already approved product's listed patents, or that such patents are invalid, is called a Paragraph IV certification. If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA applicant.

The ANDA application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the referenced product has expired.

*Exclusivity*

Upon NDA approval of a new chemical entity, or NCE, which is a drug that contains no active moiety that has been approved by FDA in any other NDA, that drug receives five years of marketing exclusivity during which FDA cannot receive any ANDA seeking approval of a generic version of that drug. An ANDA may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed. If there is no listed patent in the Orange Book, there may not be a Paragraph IV certification, and, thus, no ANDA may be filed before the expiration of the exclusivity period. Certain changes to a drug, such as the addition of a new indication to the package insert, can be the subject of a three-year period of exclusivity if the application contains reports of new clinical investigations (other than bioavailability studies) conducted or sponsored by the sponsor that were

essential to the approval of the application. The FDA cannot approve an ANDA for a generic drug that includes the change during the exclusivity period.

*Patent Term Extension*

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent extension. The allowable patent term extension is calculated as half of the drug's testing phase (the time between IND application and NDA submission) and all of the review phase (the time between NDA submission and approval up to a maximum of five years). The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years, and only one patent can be extended. For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to four times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the United States Patent and Trademark Office must determine that approval of the drug covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for a drug for which an NDA has not been submitted.

***Regulation Outside of the United States***

In addition to regulations in the United States, we are subject to a variety of regulations in other jurisdictions governing clinical trials, commercial sales, and distribution of our products. Most countries outside of the United States require that clinical trial applications be submitted to and approved by the local regulatory authority for each clinical study. In addition, whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of countries outside the United States before we can commence clinical trials or marketing of the product in those countries. The approval process and requirements vary from country to country, so the number and type of nonclinical, clinical, and manufacturing studies needed may differ, and the time may be longer or shorter than that required for FDA approval.

*Non-Clinical Studies and Clinical Trials*

Similarly to the United States, the various phases of non-clinical and clinical research in the EU are subject to significant regulatory controls.

Non-clinical studies are performed to demonstrate the health or environmental safety of new chemical or biological substances. Non-clinical studies must be conducted in compliance with the principles of good laboratory practice, or GLP, as set forth in EU Directive 2004/10/EC. In particular, non-clinical studies, both in vitro and in vivo, must be planned, performed, monitored, recorded, reported and archived in accordance with the GLP principles, which define a set of rules and criteria for a quality system for the organizational process and the conditions for non-clinical studies. These GLP standards reflect the Organization for Economic Co-operation and Development requirements. Clinical trials of medicinal products in the EU must be conducted in accordance with EU and national regulations and the ICH guidelines on GCP as well as the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. Additional GCP guidelines from the European Commission, focusing in particular on traceability, apply to clinical trials of advanced therapy medicinal products, or ATMPs. If the sponsor of the clinical trial is not established within the EU, it must appoint an EU entity to act as its legal representative. The sponsor must take out a clinical trial insurance policy, and in most EU countries member states, the sponsor is liable to provide "no fault" compensation to any study subject injured in the clinical trial.

*Marketing Authorization*

To obtain marketing approval of a product under the EU regulatory system, we are mandated to submit a Marketing Authorization Application, or MAA. The process for doing this depends, among other things, on the nature of the medicinal product. The centralized procedure, which came into operation in 1995, allows applicants

to obtain a marketing authorization that is valid throughout the EU. It is compulsory for medicinal products derived from biotechnological processes, designated orphan medicinal products, ATMPs such as gene therapy, somatic cell-therapy or tissue-engineered medicines and medicinal products containing a new active substance which was not authorized in the EU before May 20, 2004 (date of entry into force of Regulation (EC) No. 726/2004) and which are intended for the treatment of AIDS, cancer, neurodegenerative disorder, diabetes, auto immune and other immune dysfunctions and viral diseases. The centralized procedure is optional for any other products containing new active substances not authorized in the EU before May 20, 2004 or for products which constitute a significant therapeutic, scientific, or technical innovation or for which the granting of authorization is in the interests of patients at the EU level. The Committee for Advanced Therapies, or CAT, is responsible in conjunction with the Committee for Medicinal Products for Human Use, or CHMP, for the evaluation of ATMPs. The CAT is primarily responsible for the scientific evaluation of ATMPs and prepares a draft opinion on the quality, safety and efficacy of each ATMP for which a MAA is submitted. The CAT's opinion is then taken into account by the CHMP when giving its final recommendation regarding the authorization of a product in view of the balance of benefits and risks identified. Although the CAT's draft opinion is submitted to the CHMP for final approval, the CHMP may depart from the draft opinion, if it provides detailed scientific justification. The CHMP and CAT are also responsible for providing guidelines on ATMPs and have published numerous guidelines, including specific guidelines on gene therapies and cell therapies. These guidelines provide additional guidance on the factors that the EMA will consider in relation to the development and evaluation of ATMPs and include, among other things, the preclinical studies required to characterize ATMPs; the manufacturing and control information that should be submitted in a MAA; and post-approval measures required to monitor patients and evaluate the long term efficacy and potential adverse reactions of ATMPs.

When a company wishes to place on the market a medicinal product that is eligible for the centralized procedure, it sends an application directly to the EMA to be assessed by the CHMP. The CHMP is responsible for conducting the assessment of whether a medicine meets the required quality, safety, and efficacy requirements, and whether the product has a positive risk/benefit profile. The centralized procedure, as described below, culminates with a decision by the European Commission, which is valid in all EU member states. Centrally authorized products may be marketed in all member states.

Full copies of the MAAs are sent to a rapporteur and a co-rapporteur designated by the competent EMA scientific committee. They coordinate the EMA's scientific assessment of the medicinal product and prepare draft reports. Once the draft reports are prepared (other experts might be called upon for this purpose), they are sent to the CHMP, whose comments or objections are communicated to the applicant. The rapporteur is therefore the privileged interlocutor of the applicant and continues to play this role, even after the MAA has been granted.

The rapporteur and co-rapporteur then assess the applicant's replies, submit them for discussion to the CHMP, and taking into account the conclusions of this debate, prepare a final assessment report. Once the evaluation is completed, the CHMP gives a favorable or unfavorable opinion as to whether to grant the authorization. When the opinion is favorable, it will include the draft summary of the product's characteristics, the package leaflet, and the texts proposed for the various packaging materials. The time limit for the evaluation of a MAA by the EMA is 210 days (excluding clock stops). The EMA has fifteen days to forward its opinion to the European Commission. This is the start of the second phase of the procedure: the decision-making process. The EMA sends to the European Commission its opinion and assessment report, together with annexes containing: the SmPC (Annex 1); the particulars of the MAH responsible for batch release, the particulars of the manufacturer of the active substance, and the conditions of the marketing authorization (Annex 2); and the labelling and the package leaflet (Annex 3). The annexes are translated into the 22 other official languages of the EU. During the decision-making process, the European Commission services verify that the marketing authorization complies with EU law. The European Commission has fifteen days to prepare a draft decision. The medicinal product is assigned an EU registration number, which will be placed on its packaging if the marketing authorization is granted. During this period, various European Commission directorates-general are consulted on the draft marketing authorization decision.

The draft decision is then sent to the Standing Committee on Medicinal Products for Human Use, (member states have one representative in the Standing Committees on Medicinal Products for Human Use) for its opinions. The Centralized Procedure provides for the grant of a single marketing authorization that is valid for all EU member states. The Decentralized Procedure provides for approval by one or more other, or concerned, member states of an assessment of an application performed by one-member state, known as the reference member state. Under this procedure, an applicant submits an application, or dossier, and related materials including a draft summary of product characteristics, and draft labeling and package leaflet, to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to the public health, the disputed points may eventually be referred to the European Commission, whose decision is binding on all member states.

MAAs have an initial duration of five years. After these five years, the authorization may be renewed for an unlimited period on the basis of a reevaluation of the risk-benefit balance.

Under the Centralized Procedure and in exceptional cases, the CHMP might perform an accelerated review of a MAA in no more than 150 days (not including clock stops).

*Data and Marketing Exclusivity*

The EU also provides opportunities for market exclusivity. Upon receiving a MAA, reference product candidates generally receive eight years of data exclusivity and an additional two years of market exclusivity. If granted, the data exclusivity period prevents generic or biosimilar applicants from relying on the pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar MAA in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its product in the EU until 10 years have elapsed from the initial MAA of the reference product in the EU. The overall 10-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those 10 years, the MAA holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. However, there is no guarantee that a product will be considered by the EU's regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity.

In the EU, there is a special regime for biosimilars, or biological medicinal products that are similar to a reference medicinal product but that do not meet the definition of a generic medicinal product, for example, because of differences in raw materials or manufacturing processes. For such products, the results of appropriate preclinical or clinical trials must be provided, and guidelines from the EMA detail the type of quantity of supplementary data to be provided for different types of biological product. There are no such guidelines for complex biological products, such as gene or cell therapy medicinal products, and so it is unlikely that biosimilars of those products will currently be approved in the EU. However, guidance from the EMA states that they will be considered in the future in light of the scientific knowledge and regulatory experience gained at the time.

*Pediatric Development*

A Pediatric Investigation Plan, or PIP, in the EU is aimed at ensuring that the necessary data are obtained to support the authorization of a medicine for children, through studies in children. All MAAs for new medicines have to include the results of studies as described in an agreed PIP, unless the medicine is exempt because of a deferral or waiver. This requirement also applies when a marketing-authorization holder wants to add a new indication, pharmaceutical form, or route of administration for a medicine that is already authorized and covered by intellectual property rights. Several rewards and incentives for the development of pediatric medicines are available in the EU. Medicines authorized across the EU with the results of studies from a PIP included in the

product information are eligible for an extension of their supplementary protection certificate by six months (if any is in effect at the time of authorization). This is the case even when the studies' results are negative. For orphan medicines, the incentive is an additional two years of market exclusivity. Scientific advice and protocol assistance at the EMA are free of charge for questions relating to the development of pediatric medicines. Medicines developed specifically for children that are already authorized but are not protected by a patent or supplementary protection certificate are eligible for a pediatric-use marketing authorization, or PUMA. If a PUMA is granted, the product will benefit from ten years of market protection as an incentive.

In March 2016, the EMA launched an initiative, The Priority Medicines (PRIME) scheme, to facilitate development of product candidates that target an unmet medical need and are expected to be of major public health interest. Product developers that benefit from PRIME designation can expect to be eligible for accelerated assessment but this is not guaranteed. Many benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and accelerated MAA assessment once a dossier has been submitted. Importantly, a dedicated contact and rapporteur from the CHMP is appointed early in the PRIME scheme facilitating increased understanding of the product at EMA's committee level. An initial meeting initiates these relationships and includes a team of multidisciplinary experts at the EMA to provide guidance on the overall development and regulatory strategies.

*Post-Approval Requirements*

Similar to the United States, both MAA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the member states. The holder of a MAA must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance who is responsible for oversight of that system. Key obligations include expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports, or PSURs.

All new MAA must include a risk management plan, or RMP, describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk- minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies.

The advertising and promotion of medicinal products is also subject to laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription medicines is also prohibited in the EU. Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each Member State and can differ from one country to another.

*Brexit and the Regulatory Framework in the United Kingdom*

The UK left the EU on January 31, 2020, following which existing EU medicinal product legislation continued to apply in the UK during the transition period under the terms of the EU-UK Withdrawal Agreement. The transition period, which ended on December 31, 2020, maintained access to the EU single market and to the global trade deals negotiated by the EU on behalf of its members. The transition period provided time for the UK and EU to negotiate a framework for partnership for the future, which was then crystallized in the Trade and Cooperation Agreement, or TCA, and became effective on the January 1, 2021. The TCA includes specific provisions concerning pharmaceuticals, which include the mutual recognition of GMP inspections of manufacturing facilities for medicinal products and GMP documents issued, but does not foresee wholesale mutual recognition of UK and EU pharmaceutical regulations.

EU laws which have been transposed into UK law through secondary legislation continue to be applicable as "retained EU law". However, new legislation such as the EU CTR will not be applicable. The UK government has passed a new Medicines and Medical Devices Act 2021, which introduces delegated powers in favor of the Secretary of State or an "appropriate authority" to amend or supplement existing regulations in the area of medicinal products and medical devices. This allows new rules to be introduced in the future by way of secondary legislation, which aims to allow flexibility in addressing regulatory gaps and future changes in the fields of human medicines, clinical trials and medical devices.

As of January 1, 2021, the Medicines and Healthcare products Regulatory Agency, or MHRA, is the UK's standalone medicines and medical devices regulator. As a result of the Northern Ireland protocol, different rules will apply in Northern Ireland than in England, Wales, and Scotland, together, Great Britain, or GB. Broadly, Northern Ireland will continue to follow the EU regulatory regime, but its national competent authority will remain the MHRA. The MHRA has published a guidance on how various aspects of the UK regulatory regime for medicines will operate in GB and in Northern Ireland following the expiry of the Brexit transition period on December 31, 2020. The guidance includes clinical trials, importing, exporting, and pharmacovigilance and is relevant to any business involved in the research, development, or commercialization of medicines in the UK. The new guidance was given effect via the Human Medicines Regulations (Amendment etc.) (EU Exit) Regulations 2019, or the Exit Regulations. The MHRA has introduced changes to national licensing procedures, including procedures to prioritize access to new medicines that will benefit patients, including a 150-day assessment and a rolling review procedure. All existing EU MAAs for centrally authorized products were automatically converted or grandfathered into UK MAs, effective in GB (only), free of charge on January 1, 2021, unless the MAA holder chooses to opt-out. In order to use the centralized procedure to obtain a MAA that will be valid throughout the EEA, companies must be established in the EEA. Therefore after Brexit, companies established in the UK can no longer use the EU centralized procedure and instead an EEA entity must hold any centralized MAAs. In order to obtain a UK MAA to commercialize products in the UK, an applicant must be established in the UK and must follow one of the UK national authorization procedures or one of the remaining post-Brexit international cooperation procedures to obtain a MAA to commercialize products in the UK. The MHRA may rely on a decision taken by the European Commission on the approval of a new (centralized procedure) MAA when determining an application for a GB authorization or use the MHRA's decentralized or mutual recognition procedures which enable MAAs approved in EU member states (or Iceland, Liechtenstein, Norway) to be granted in GB.

***Other Healthcare Laws***

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain general business and marketing practices in the pharmaceutical industry. These laws include anti-kickback, false claims, transparency and health information privacy laws and other healthcare laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid, or other federally financed healthcare programs. The Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act, or ACA, amended the intent element of the federal Anti-Kickback Statute so that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to commit a violation. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers, among others, on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Additionally, the ACA amended the federal Anti-Kickback Statute such that a violation of that statute can serve as a basis for liability under the federal civil False Claims Act.

Federal civil and criminal false claims laws, including the federal civil False Claims Act, prohibit any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. This includes claims made to programs where the federal government reimburses, such as Medicare and Medicaid, as well as programs where the federal government is a direct purchaser, such as when it purchases off the Federal Supply Schedule. Pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. Most states also have statutes or regulations similar to the federal Anti-Kickback Statute and civil False Claims Act, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Other federal statutes pertaining to healthcare fraud and abuse include the Civil Monetary Penalties Law statute, which prohibits, among other things, the offer or payment of remuneration to a Medicaid or Medicare beneficiary that the offeror or payor knows or should know is likely to influence the beneficiary to order or receive a reimbursable item or service from a particular supplier, and the additional federal criminal statutes created by the Health Insurance Portability and Accountability Act of 1996, or HIPAA, which prohibit, among other things, 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 money or property owned by or under the control of any healthcare benefit program in connection with the delivery of or payment for healthcare benefits, items or services.

In addition, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, including the Final Omnibus Rule published on January 25, 2013, impose obligations on certain healthcare providers, health plans and healthcare clearinghouses, known as covered entities, as well as their business associates and their subcontractors that perform certain services involving the storage, use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and require notification to affected individuals and regulatory authorities of certain breaches of security of individually identifiable health information. HITECH increased the civil and criminal penalties that may be imposed against covered entities, business associates, their covered subcontractors and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, many state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, and often are not pre-empted by HIPAA.

Further, pursuant to the ACA, the Centers for Medicare & Medicaid Services, or CMS, issued a final rule that requires certain manufacturers of prescription drugs to collect and annually report information on certain payments or transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other health care professionals (such as physicians assistants and nurse practitioners) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. The reported data are made available in searchable form on a public website on an annual basis. Failure to submit required information may result in civil monetary penalties.

Analogous state and foreign anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non- governmental third-party payors, including private insurers, or that apply regardless of payor. In addition, several states now require prescription drug companies to report certain expenses relating to the marketing and promotion of drug products and to report gifts and payments to individual healthcare practitioners in these states. Other states prohibit various marketing-related activities, such as the provision of certain kinds of gifts or meals. Further, certain states

require the posting of information relating to clinical trials and their outcomes. Some states require the reporting of certain drug pricing information, including information pertaining to and justifying price increases. In addition, certain states require pharmaceutical companies to implement compliance programs and/or marketing codes. Several additional states are considering similar proposals. Certain states and local jurisdictions also require the registration of pharmaceutical sales representatives. Additionally, we may also be subject to state and foreign laws governing the privacy and security of health information in some circumstances, such as California's CCPA or Europe's General Data Protection Regulation, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that business arrangements with third parties comply with applicable state, federal and foreign healthcare laws and regulations involve substantial costs. If a drug company's operations are found to be in violation of any such requirements, it may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, the curtailment or restructuring of its operations, loss of eligibility to obtain approvals from the FDA, exclusion from participation in government contracting, healthcare reimbursement or other federal or state government healthcare programs, including Medicare and Medicaid, integrity oversight and reporting obligations, imprisonment and reputational harm. Although effective compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, these risks cannot be entirely eliminated. Any action for an alleged or suspected violation can cause a drug company to incur significant legal expenses and divert management's attention from the operation of the business, even if such action is successfully defended.

***Healthcare Reform***

Healthcare reforms that have been adopted, and that may be adopted in the future, could result in further reductions in coverage and levels of reimbursement for pharmaceutical products, increases in rebates payable under U.S. government rebate programs and additional downward pressure on pharmaceutical product prices. On September 9, 2021, the Biden administration published a wide-ranging list of policy proposals, most of which would need to be carried out by Congress, to reduce drug prices and drug payment. The Department of Health and Human Services, or HHS, plan includes, among other reform measures, proposals to lower prescription drug prices, including by allowing Medicare to negotiate prices and disincentivizing price increases, and to support market changes that strengthen supply chains, promote biosimilars and generic drugs, and increase price transparency. These initiatives recently culminated in the enactment of the Inflation Reduction Act, or IRA, in August 2022, which will, among other things, allow HHS to negotiate the selling price of certain drugs and biologics that CMS reimburses under Medicare Part B and Part D, although this will only apply to high-expenditure single-source drugs that have been approved for at least 7 years (11 years for biologics). The negotiated prices, which will first become effective in 2026, will be capped at a statutory ceiling price representing a significant discount from average prices to wholesalers and direct purchasers. The law will also, beginning in October 2023, penalize drug manufacturers that increase prices of Medicare Part B and Part D drugs at a rate greater than the rate of inflation. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. These provisions will take effect progressively starting in 2023, although they may be subject to legal challenges.

***Coverage and Reimbursement***

Patients in the U.S. and elsewhere generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Accordingly, market acceptance of THB001 or any future product candidates, if approved, will be dependent on the extent to which third-party coverage and reimbursement is available from third-party payors, including government health program administration authorities (including in connection with government healthcare programs, such as Medicare and Medicaid), private healthcare insurers and other healthcare funding organizations. Coverage and reimbursement policies for products can differ significantly from payor to payor, as there is no uniform policy of coverage and reimbursement for products among commercial third-party payors in the United States. There also may be significant delays in obtaining

coverage and reimbursement, as the process of determining coverage and reimbursement is often time consuming and can require health care providers to provide clinical support for the use of our products to each payor separately, with no assurance that coverage or adequate reimbursement will be obtained. In addition, the increased emphasis by such third-party payors and government authorities in the United States on managed care and cost containment measures will continue to place pressure on pharmaceutical pricing and coverage. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for THB001 or any future product candidates, if approved, less favorable coverage policies and reimbursement rates may be implemented in the future.

**Employees and Human Capital Resources**

As of June 30, 2022, we had 16 employees, all of whom were full-time and nine of whom were engaged in research and development activities. Six of our employees hold Ph.D. or M.D. degrees. None of our employees are represented by a labor union or covered under a collective bargaining agreement. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity and cash incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

**Facilities**

We are currently a remote-based company, and substantially all of our employees work remotely. We currently lease office space in Cambridge, Massachusetts from Atlas Venture Life Science Advisors, LLC on a monthly basis, but do not otherwise maintain a corporate headquarters. As we expand, we believe suitable additional or substitute space will be available as and when needed.

**Legal Proceedings**

From time to time, we may be subject to legal proceedings. We are not currently a party to or aware of any proceedings that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

## MANAGEMENT

### Executive Officers and Directors

The following table provides information, including ages as of August 31, 2022, regarding our executive officers and directors:

| Name | Age | Position |
|---|---|---|
| **Executive Officers and Employee Directors:** | | |
| Natalie Holles | 50 | Chief Executive Officer and Director |
| Edward R. Conner, M.D. | 49 | Chief Medical Officer |
| Robert Ho | 47 | Chief Financial Officer |
| Julie Person | 49 | Chief Administrative Officer |
| Adrian S. Ray, Ph.D. | 47 | Chief Scientific Officer |
| **Non-Employee Directors:** | | |
| Mark Iwicki(1) | 55 | Chairman of the Board, Director |
| David P. Bonita, M.D.(1) | 47 | Director |
| Michael Gladstone(1) | 35 | Director |
| Shao-Lee Lin, M.D., Ph.D.(3) | 56 | Director |
| Rob Perez(2) | 58 | Director |
| Jason Rhodes(4) | 53 | Director |
| H. Martin Seidel, Ph.D.(2)(3) | 58 | Director |
| Thomas M. Soloway(2)(3) | 55 | Director |

(1) Member of the Compensation Committee.
(2) Member of the Audit Committee.
(3) Member of the Nominating and Governance Committee.
(4) Mr. Rhodes has notified us that he will resign from our board of directors effective immediately prior to the effectiveness of the registration statement of which this prospectus forms a part.

#### *Executive Officers and Employee Directors*

**Natalie Holles** has served as our Chief Executive Officer and a member of our board of directors since August 2021. Prior to joining us, Ms. Holles worked at Audentes Therapeutics, Inc., or Audentes, serving as President and Chief Executive Officer from January 2020 through March 2021, President and Chief Operating Officer from May 2018 to January 2020 and Senior Vice President, Chief Operating Officer from August 2015 to May 2018. Previously, Ms. Holles served as Senior Vice President, Corporate and Business Development at Hyperion Therapeutics, Inc., from June 2013 through its acquisition by Horizon Pharma, plc in May 2015. From December 2010 to June 2013, Ms. Holles served as an independent life sciences corporate development consultant. Earlier in her career, Ms. Holles served as the Vice President, Business Development at KAI Pharmaceuticals, Inc., which was acquired by Amgen, Inc. in 2012, and previously held business development and commercial roles at InterMune, Inc. and Genentech, Inc. In addition to serving on our board of directors, Ms. Holles also currently serves on the board of Day One Biopharmaceuticals, Inc. since January 2021. Formerly, Ms. Holles served on the board of directors of Rubius Therapeutics, Inc. from March 2019 to August 2022 and Allakos Inc. from December 2020 to August 2021. Ms. Holles holds a B.A. in human biology from Stanford University and an M.A. in molecular, cellular and developmental biology from the University of Colorado, Boulder. We believe Ms. Holles is qualified to serve on our board of directors because of her operational leadership and business development experience.

**Edward R. Conner, M.D.** has served as our Chief Medical Officer since June 2022. Dr. Conner previously served as Chief Medical Officer of Locanabio, Inc., or Locanabio, from July 2021 until June 2022. Prior to joining Locanabio, Dr. Conner was the Site Lead and Division Head of Gene Therapy Medical & Development at Astellas Gene Therapies, or Astellas, from January 2020 to July 2021. Before Astellas, Dr. Conner served as the Chief Medical Officer and Senior Vice President of Audentes (now Astellas Gene Therapies) from July 2019 to January 2020. Dr. Conner previously served as Chief Medical Officer and Senior Vice President at Sangamo

Therapeutics, Inc. from November 2016 until May 2019, and as Vice President, Clinical Development of Ultragenyx Pharmaceutical Inc. from January 2015 until October 2016. Earlier in his career, Dr. Conner also served as the Senior Medical Director at BioMarin Pharmaceutical Inc. from November 2013 to December 2014 and as Medical Director at Genentech, Inc. (now a member of the Roche Group) from June 2008 to October 2013. In these roles, Dr. Conner led functions including clinical development and operations, medical affairs, regulatory, drug safety and patient advocacy. Dr. Conner has been a member of the board of directors of Imara Inc. since April of 2020. Dr. Conner holds a B.S. in biology from Duke University and an M.D. from the University of California, San Francisco.

**Robert Ho** has served as our Chief Financial Officer since March 2022. Prior to joining us, Mr. Ho worked at Neoleukin Therapeutics, Inc. serving as Chief Financial Officer from March 2020 to March 2022. Mr. Ho served in various positions at Davita Inc., including most recently as Senior Finance Director from January 2016 to March 2020. Prior to that, and a one-year break in service, Mr. Ho served as Strategic Financial Advisor to a privately owned company from February 2007 to December 2014. Mr. Ho also served in various positions at Morgan Stanley from March 2004 to February 2007, including most recently as a Vice President in the Healthcare Investment Banking Division. Mr. Ho holds a B.B.A. in accountancy and computer applications from the University of Notre Dame and an M.B.A. from the University of Virginia Darden School of Business.

**Julie Person** has served as our Chief Administrative Officer since June 2022. Ms. Person served as the Chief People Officer of Neumora Therapeutics, Inc., or Neumora, from January 2021 until June 2022. Prior to joining Neumora, Ms. Person was the Senior Vice-President of Human Resources at Audentes from April 2020 to January 2021 and the Vice-President of Human Resources at Sangamo Therapeutics, Inc. from March 2019 to April 2020. Ms. Person also served as Vice President Talent and Organization Development at Shire plc (now Takeda Pharmaceutical Co Ltd) from February 2017 until March 2019, and as its Vice President of Global Head of Talent Management from June 2016 until February 2017. Ms. Person earned a B.A. in Communications from the Saint Mary's College of California and attended the University of Michigan Ross School of Business Executive Leadership Program.

**Adrian S. Ray, Ph.D.** has served as our Chief Scientific Officer since April 2022. Prior to joining us, Dr. Ray worked at Morphic Therapeutic Inc. serving as the Senior Vice President of Biology and Translation from February 2020 through March 2022, and Vice President and Head of Translational Sciences from November 2018 through February 2020. Dr. Ray served as Senior Vice President of Discovery Biology at Nimbus Therapeutics from May 2018 to October 2018. Prior to that, Dr. Ray held positions of increasing responsibility in research and development at Gilead Sciences, Inc. from June 2002 to May 2018, serving most recently as Senior Director Clinical Research from October 2016 to May 2018. Dr. Ray holds a B.A. in molecular, cellular and developmental biology from the University of California, Santa Cruz and a Ph.D. in molecular, cellular, and developmental biology from Yale University.

***Non-Employee Directors***

**Mark Iwicki** has served as Chairman of our board of directors since May 2020. Mr. Iwicki also currently serves as Chief Executive Officer and Executive Chairman of the board of directors of Kala Pharmaceuticals, Inc., since March 2015. Prior to joining Kala Pharmaceuticals, Mr. Iwicki served as President and Chief Executive Officer of Civitas Therapeutics, Inc. from January 2014 to November 2014. Prior to Civitas, Mr. Iwicki served as President and Chief Executive Officer at Tarveda Therapeutics, Inc. (formerly known as Blend Therapeutics, Inc.) from December 2012 to January 2014. Prior to Blend, Mr. Iwicki was President and Chief Executive Officer of Sunovion Pharmaceuticals Inc. (formerly known as Sepracor Inc.) from October 2007 to June 2012. Prior to joining Sunovion, Mr. Iwicki was Vice President and Business Unit Head at Novartis Pharmaceuticals Corporation from March 1998 to October 2007. Prior to that, Mr. Iwicki held sales positions at Astra Merck Inc. and Merck & Co., Inc. In addition to serving on our board of directors, Mr. Iwicki also currently serves on the boards of Merus N.V., Pulmatrix Inc., Akero Therapeutics, Inc., Aerovate Therapeutics, Inc., and Kala Pharmaceuticals, Inc. In the past five years, Mr. Iwicki also served on the Aimmune Therapeutics,

Inc. board of directors. Mr. Iwicki holds a B.S. in marketing from Ball State University and an M.B.A. from Loyola University Maryland. We believe that Mr. Iwicki is qualified to serve on our board of directors because of his extensive experience as a pharmaceutical industry leader managing all stages of drug development and commercialization in multiple therapeutic areas.

**David P. Bonita, M.D.** has served as a member of our board of directors since July 2020. Dr. Bonita is currently a member at OrbiMed Advisors LLC, an investment firm, where he has served in various roles of increasing responsibility since 2004. Dr. Bonita currently serves on the boards of directors of Acutus Medical, Inc., Ikena Oncology, Inc., IMARA Inc., Prelude Therapeutics, Inc., Repare Therapeutics Inc., and Tricida, Inc., as well as several private companies. Dr. Bonita previously served on the boards of directors of several companies, including Clementia Pharmaceuticals Inc., Loxo Oncology, Inc., SI-BONE Inc., and ViewRay Inc. Dr. Bonita has also worked as a corporate finance analyst in the healthcare investment banking groups of Morgan Stanley and UBS. He has published scientific articles in peer-reviewed journals based on signal transduction research performed at the Harvard Medical School. He received his A.B. in Biological Sciences from Harvard University and his joint M.D./M.B.A. from Columbia University. We believe Dr. Bonita is qualified to serve on our board of directors because of his operational and business development experience.

**Michael Gladstone** has served as a member of our board of directors since April 2019. Mr. Gladstone previously served as our Chief Executive Officer from June 2019 through August 2021. He is a partner at Atlas Venture. Prior to joining Atlas in March 2012, Mr. Gladstone worked at L.E.K. Consulting from December 2009 through March 2012, and previously, he conducted HIV vaccine research in the Viral Pathogenesis department of Beth Israel Deaconess Medical Center. Mr. Gladstone is a member of the Corporate Advisory Committee for National Tay Sachs and Allied Diseases and serves as an advisor to several other organizations. Since December 2019, Mr. Gladstone has served as a member of the board of directors of Day One Biopharmaceuticals, Inc. Gladstone holds an B.S. in biochemical sciences from Harvard University. We believe Mr. Gladstone is qualified to serve on our board of directors because of his extensive experience in the field of biotechnology.

**Shao-Lee Lin, M.D., Ph.D.** has served as a member of our board of directors since September 2020. Dr. Lin co-founded and currently serves as the Chief Executive Officer of ACELYRIN, Inc. since its formation in July 2020. From January 2018 to January 2020, Dr. Lin served as Executive Vice President, Research and Development and Chief Scientific Officer at Horizon Pharma plc. From March 2015 to December 2017, Dr. Lin served as a corporate officer and Vice President of Therapeutic Areas, Development Excellence and International Development at Abbvie Inc. Prior to Abbvie, Dr. Lin served as Vice President, Inflammation and Respiratory Development at Gilead Sciences from August 2012 to February 2015 and served in various roles of increasing responsibility at Amgen, Inc. from April 2004 to August 2012. In addition to serving on our board of directors, Dr. Lin has served on the Surrozen, Inc. board of directors since January 2021, and formerly served on the board of directors of Principia Biopharma Inc., from April 2019 until it was acquired in September 2020. Dr. Lin also serves as a Clinical Scholar at The Rockefeller University and adjunct faculty at the medical schools of Cornell University, The University of California, Los Angeles, Stanford University and Northwestern University. Dr. Lin received her B.A. in biochemistry and chemical engineering from Rice University and holds a joint M.D./Ph.D in medicine and biochemistry from Johns Hopkins University. We believe that Dr. Lin's scientific training, work experience, and experience as a director of other publicly traded biopharmaceutical companies provide her with the qualifications and skills to serve on our board of directors.

**Rob Perez** has served as a member of our board of directors since December 2021. He has served as an Operating Partner at General Atlantic Service Company, L.P. since January 2019. Prior to that, Mr. Perez served as a Managing Director of Vineyard Sound Advisors, LLC from March 2015 through January 2019. Previously, Mr. Perez worked at Cubist Pharmaceuticals, Inc, from October 2003 to January 2015, where he served as Chief Commercial Officer, Chief Operations Officer, President and Chief Executive Officer at the time of its sale to Merck & Co., Inc. in January 2015. Before joining Cubist, he worked at Biogen Inc. from June 1995 until October 2003, where he served in various commercial roles, including as Vice President of Biogen's CNS Business Unit. Mr. Perez has served as a board member for Unum Therapeutics, Inc. since March 2018, Spark

Therapeutics, Inc. since January 2018 and AMAG Pharmaceuticals, Inc. since February 2009. Mr. Perez holds a joint B.S./B.A. in business from California State University, Los Angeles and an M.B.A. from the Anderson Graduate School of Management at the University of California, Los Angeles. We believe Mr. Perez is qualified to serve on our board of directors because of his operational and business development experience.

**Jason Rhodes** has served as a member of our board of directors since June 2019. Mr. Rhodes has been a partner at Atlas Venture since 2014. He was the chairman and founding Chief Executive Officer of Disarm Therapeutics, which was acquired by Eli Lilly in 2020. Mr. Rhodes has served as the chairman and the founding Chief Executive Officer of Generation Bio since 2016, and Dyne Therapeutics since 2018. He has served as a board member for Replimune Group Inc. since 2015, and Gemini Therapeutics, Inc. since 2016. Mr. Rhodes received his B.A. from Yale University and his M.B.A. from the Wharton School of the University of Pennsylvania. We believe Mr. Rhodes is qualified to serve on our board of directors because of his extensive experience in the field of biotechnology and as a director of other publicly traded biopharmaceutical companies.

**H. Martin Seidel, Ph.D.** has served as a member of our board of directors since July 2019. Dr. Seidel has served as Chief Executive Officer of IFM Therapeutics since December 2019, after serving as Executive Vice President of Research and Development since June 2017. Prior to IFM Therapeutics, Dr. Seidel served as Global Head Global Head of Strategic Alliances for the Novartis Institutes for Biomedical Research from March 2014 through June 2017. Prior to that, Dr. Seidel held positions of increasing responsibility at of NIBR's Genomics Institute of the Novartis Research Foundation from 2003 through 2014, ultimately serving as Institute Director and Site Head from 2010 to 2014. Dr. Seidel received his B.A. in chemistry from Princeton University and his Ph.D. from Harvard University. We believe Dr. Seidel is qualified to serve on our board of directors because of his extensive research and operational experience.

**Thomas M. Soloway** has served as a member of our board of directors since July 2022. Since December 2020, Mr. Soloway has served as the Chief Executive Officer and a member of the board of directors of T-Knife Therapeutics, Inc. From September 2015 to September 2020, he held positions of increasing responsibility at Audentes, ultimately serving as Executive Vice President, Chief Financial Officer. Previously, Mr. Soloway served as Senior Vice President, Chief Financial Officer of Ascendis Pharma A/S, or Ascendis, a biopharmaceutical company, from January 2014 until September 2015. Prior to Ascendis, Mr. Soloway co-founded Transcept Pharmaceuticals, Inc., or Transcept, in 2002, where he held positions of increasing responsibility, serving initially as Senior Vice President, Operations and Chief Financial Officer and subsequently as Executive Vice President, Chief Operating Officer until December 2013. Prior to Transcept, Mr. Soloway was a Principal at Montreux Equity Partners, a venture capital firm focused on providing growth capital for early-stage healthcare and life sciences companies. Since July 2020, Mr. Soloway has also served on the board of Satsuma Pharmaceuticals, Inc., a biopharmaceutical company. He holds a B.S. in Entrepreneurial Studies from the University of Southern California and an M.B.A. from Georgetown University. We believe that Mr. Soloway is qualified to serve on our board of directors based on his over 25 years of experience in the life sciences industry, with senior roles in strategy, operations, corporate finance and venture capital.

**Election of Executive Officers**

Our executive officers are appointed by, and serve at the discretion of, our board of directors.

**Family Relationships**

There are no family relationships among any of our executive officers or directors.

**Board Composition**

Our board of directors currently consists of nine members. Eight of our directors are independent within the meaning of the independent director guidelines of Nasdaq. Pursuant to our current certificate and our amended and restated voting agreement, as amended, Natalie Holles, Mark Iwicki, David P. Bonita, M.D., Michael Gladstone, Shao-Lee Lin, Rob Perez, Jason Rhodes, H. Martin Seidel and Thomas M. Soloway have

been designated to serve as members of our board of directors. The amended and restated voting agreement, as amended, and the provisions of our current certificate that govern the election and designation of our directors will terminate in connection with this offering, after which no contractual obligations will concern the election of our directors. Immediately prior to the effectiveness to the registration statement of which this prospectus forms a part, our board of directors will consist of eight members, seven of which are independent within the meaning of the independent director guidelines of Nasdaq.

**Classified Board of Directors**

In accordance with the terms of our restated certificate of incorporation and restated bylaws that will become effective upon the completion of this offering, our board of directors will be divided into three staggered classes of directors. At each annual meeting of our stockholders, a class of directors will be subject to re-election for a three-year term. As a result, only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

Our directors will be divided among the three classes as follows:

- the Class I directors will be Mark Iwicki, Natalie Holles and Rob Perez, and their terms will expire at the first annual meeting of our stockholders held following the completion of the offering;
- the Class II directors will be Michael Gladstone, Shao-Lee Lin and H. Martin Seidel, and their terms will expire at the second annual meeting of our stockholders held following the completion of the offering; and
- the Class III directors will be David Bonita and Thomas M. Soloway and their terms will expire at the third annual meeting of our stockholders held following the completion of the offering.

Each director's term continues until the election and qualification of his or her successor, or his or her earlier death, resignation or removal. Our restated certificate of incorporation and restated bylaws that will be in effect upon the completion of this offering authorize only our board of directors to fill vacancies on our board of directors. Any increase or decrease 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. This classification of our board of directors may have the effect of delaying or preventing changes in control of our company. See the section titled "Description of Capital Stock—Anti-Takeover Provisions—Restated Certificate of Incorporation and Restated Bylaw Provisions" for additional information.

**Director Independence**

In connection with this offering, we have applied to list our common stock on Nasdaq. Under the rules of Nasdaq, independent directors must comprise a majority of a listed company's board of directors within a specified period following the completion of this offering. In addition, the rules of Nasdaq require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent. Under the rules of Nasdaq, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (i) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or (ii) be an affiliated person of the listed company or any of its subsidiaries. We intend to satisfy the audit committee independence requirements of Rule 10A-3 as of the completion of this offering. Additionally, compensation committee members must not have a relationship with us that is material to the director's ability to be independent from management in connection with the duties of a compensation committee member.

Our board of directors has undertaken a review of the independence of each director and considered whether each director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. As a result of this review, our board of directors determined that all of our directors, except for Ms. Holles, are "independent directors" as defined under the current Nasdaq listing standards and SEC rules and regulations. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management, including the beneficial ownership of our capital stock by each non-employee director and the transactions involving them as described in the section titled "Certain Relationships and Related Party Transactions."

**Committees of the Board of Directors**

Our board of directors has an audit committee, a compensation committee and a nominating and governance committee, each of which will have the composition and responsibilities described below as of the completion of this offering. Each of the below committees has a written charter approved by our board of directors. Upon completion of this offering, copies of each charter will be posted on the investor relations page of our website. Members that serve on these committees will serve until their resignation or until otherwise determined by our board of directors.

***Audit Committee***

Effective upon the effectiveness of the registration statement of which this prospectus is a part, our audit committee will be composed of Rob Perez, H. Martin Seidel, Ph.D. and Thomas M. Soloway, with Mr. Soloway serving as the chairperson of our audit committee. Our board of directors has determined that the composition of our audit committee meets the requirements for independence under the current Nasdaq listing standards and SEC rules and regulations, and that each member of our audit committee is financially literate. In addition, our board of directors has determined that Mr. Soloway is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act. This designation does not impose on him or her any duties, obligations or liabilities that are greater than are generally imposed on members of our audit committee and our board of directors.

Our audit committee is directly responsible for, among other things:

- selecting and hiring our independent registered public accounting firm;
- the qualifications, independence and performance of our independent registered public accounting firm;
- the preparation of the audit committee report to be included in our annual proxy statement;
- our compliance with legal and regulatory requirements;
- assisting our board of directors with risk assessment and management, including cybersecurity risk management;
- our accounting and financial reporting processes, including our financial statement audits and the integrity of our consolidated financial statements; and
- reviewing and approving related-person transactions.

***Compensation Committee***

Effective upon the effectiveness of the registration statement of which this prospectus is a part, our compensation committee will be composed of Mark Iwicki, David P. Bonita, M.D. and Michael Gladstone, with Mr. Iwicki serving as the chairperson of our compensation committee. Our board of directors has determined that each member of our compensation committee is a non-employee director, as defined by Rule 16b-3 promulgated under the Exchange Act, and meets the requirements for independence under the current Nasdaq listing standards and SEC rules and regulations.

Our compensation committee is responsible for, among other things:

- evaluating, recommending, approving and reviewing executive officer compensation arrangements, plans, policies and programs;
- evaluating and recommending non-employee director compensation arrangements for determination by our board of directors;
- administering our cash-based and equity-based compensation plans; and
- overseeing our compliance with regulatory requirements associated with the compensation of directors, executive officers and employees.

***Nominating and Governance Committee***

Effective upon the effectiveness of the registration statement of which this prospectus is a part, our nominating and governance committee will be composed of Shao-Lee Lin, M.D., Ph.D., H. Martin Seidel, Ph.D. and Thomas M. Soloway, with Dr. Lin, M.D., Ph.D. serving as the chairperson of our nominating and governance committee. Our board of directors has determined that each member of our nominating and governance committee meets the requirements for independence under the current Nasdaq listing standards.

Our nominating and governance committee is responsible for, among other things:

- identifying, considering and recommending candidates for membership on our board of directors;
- overseeing the process of evaluating the performance of our board of directors; and
- advising our board of directors on environmental, social and other corporate governance matters.

**Compensation Committee Interlocks and Insider Participation**

None of the members of our compensation committee has been an officer or employee of our Company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions) of any entity that has one or more of its executive officers serving on our board of directors or compensation committee. See the section titled “Certain Relationships and Related Party Transactions” for additional information. Prior to establishing the compensation committee, our full board of directors made decisions relating to the compensation of our officers.

**Code of Business Conduct and Ethics**

Prior to the completion of this offering, our board of directors will adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including our President and Chief Executive Officer and other executive and senior officers. The full text of our code of business conduct and ethics will be

posted on the investor relations page of our website. The reference to our website address in this prospectus does not include or incorporate by reference the information on our website into this prospectus. We intend to disclose future amendments to certain provisions of our code of business conduct and ethics, or waivers of these provisions, on our website or in public filings to the extent required by the applicable rules.

**Non-Employee Director Compensation**

Our employee directors have not received any compensation or reimbursement of any expenses (other than customary expenses in connection with the attendance of meetings of our board of directors) for their services as directors for the year ended December 31, 2021.

The following table sets forth information concerning the compensation paid to certain of our non-employee directors for the year ended December 31, 2021:

| Name | Fees Earned or Paid in Cash ($) | Option Awards ($)(1)(2) | All Other Compensation ($) | Total ($) |
|---|---|---|---|---|
| Mark Iwicki | 25,000 | 6,027 | — | 31,027 |
| David P. Bonita, M.D. | — | — | — | — |
| Michael Gladstone | — | — | — | — |
| Shao-Lee Lin, M.D., Ph.D. | 25,000 | 4,018 | — | 29,018 |
| Rob Perez | — | — | — | — |
| Jason Rhodes | — | — | — | — |
| H. Martin Seidel, Ph.D. | 25,000 | 4,018 | — | 29,018 |

(1) Amounts reflect the full grant date fair value of awards of stock or options granted for the year ended December 31, 2021 computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual.
(2) As of December 31, 2021, Mr. Iwicki held an aggregate of 4,299 options to purchase common stock, Dr. Lin held an aggregate of 88,619 options to purchase common stock and Dr. Seidel held an aggregate of 2,866 options to purchase common stock. None of our other non-employee directors held equity as of December 31, 2021.

**Non-Employee Director Compensation Policy**

Prior to this offering, we did not have a formal policy to provide any cash or equity compensation to our non-employee directors for their service as directors.

In connection with this offering, our board of directors approved the following non-employee director compensation policy.

Following the completion of this offering, each non-employee director will be entitled to receive cash and options under our 2022 Plan.

*Cash Retainer.* Cash compensation payable to each non-employee director shall consist of the following annual fees, which shall be paid quarterly in arrears and shall be pro-rated for partial quarters served, including for the initial quarter in which this policy is adopted: (i) an annual cash retainer of $40,000; (ii) $15,000, $10,000 or $8,000 if the individual is the chair of the Audit Committee, the Compensation Committee or the Nominating and Governance Committee, respectively; (iii) $7,500, $5,000 or $4,000 if the individual is a member (but not chair) of the Audit Committee, the Compensation Committee or the Nominating and Governance Committee, respectively; (iii) $30,000 if the individual is a chair of our board of directors; and (iv) between $15,000 and $30,000 if the individual is a lead independent director on our board of directors.

*Initial Award Option Grant*. Following the completion of this offering, each non-employee director newly appointed to our board of directors following this offering will be granted options to purchase shares of our

common stock, or Initial Award Options, on the date of his or her appointment to our board of directors with an aggregate value of $440,000. The Initial Award Options will vest in equal monthly installments over a period of three years from the grant date, so long as the non-employee director continues to provide services to us through each such date. The Initial Award Options will fully vest upon the consummation of a corporate transaction (as defined in the 2022 Plan).

If an individual is appointed as a non-employee director at an annual meeting of stockholders, he or she will be granted an Initial Award Option in lieu of the Annual Option Grant, as described below.

*Annual Option Grant.* Each non-employee director who is serving on our board of directors and who continues to serve on our board of directors following an annual meeting of our stockholders will automatically be granted, on an annual basis, options to purchase shares of common stock, or Annual Options, under our 2022 Plan with an aggregate value of $220,000. The Annual Options will vest on the earlier of (i) the date of the next annual meeting of our stockholders and (ii) the date that is one year following the Annual Option grant date, in each case so long as the non-employee director continues to provide services to us through such date. In addition, the Annual Options will fully vest upon the consummation of a corporate transaction (as defined in the 2022 Plan).

Employee directors will receive no additional compensation for their service as a director.

*Non-Employee Director Compensation Limits*. No non-employee director may receive equity awards under our 2022 Plan with an aggregate grant date fair value (determined as set forth in the 2022 Plan) that, when combined with cash compensation received for service as a non-employee director, exceeds $1,000,000 in any calendar year, or in the case of the first year of such individual's service with the Company as a non-employee director, $1,500,000.

## EXECUTIVE COMPENSATION

The following tables and accompanying narrative disclosure set forth information about the compensation earned by our named executive officers during the year ended December 31, 2021. Our named executive officers, who are our principal executive officer, former principal executive officer, and the two most highly compensated executive officers (other than our principal executive officer) serving as executive officers as of December 31, 2021, were:

- Natalie Holles, Chief Executive Officer;
- Howard E. Davis, Jr., Ph.D., Former Chief Operating Officer;
- Stephen Yoo, M.D., Former Chief Medical Officer; and
- Michael Gladstone, Former Chief Executive Officer.

### Summary Compensation Table

The following table presents summary information regarding the total compensation for services rendered in all capacities that was awarded to, earned by or paid to our named executive officers for the year ended December 31, 2021.

| Name and Principal Position | Salary($) | Bonuses ($) | Non-Equity Incentive Plan Compensation ($)[1] | Option Awards ($)[2] | All Other Compensation ($) | Total($) |
|---|---|---|---|---|---|---|
| Natalie Holles[3]<br>*Chief Executive Officer* | 197,115 | — | 109,247 | 1,743,965 | — | 2,025,920 |
| Howard E. Davis, Jr., Ph.D. [4]<br>*Former Chief Operating Officer* | 336,734 | — | 129,310 | 13,244 | — | 479,101 |
| Stephen Yoo, M.D. [5]<br>*Former Chief Medical Officer* | 398,438 | — | 152,899 | 16,810 | — | 567,911 |
| Michael Gladstone[6]<br>*Former President and Chief Executive Officer* | — | — | — | — | — | — |

(1) For additional information regarding the non-equity incentive plan compensation, see the section titled "Annual Performance-Based Bonuses."
(2) Represents the grant date fair value of options awarded during the year ended December 31, 2021 as computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in the Option award column are set forth in Note 8 to our consolidated financial statements included elsewhere in this prospectus. Note that the amounts reported in this column reflect the aggregate accounting cost for these awards, and do not necessarily correspond to the actual economic value that may be received by each named executive officer from the options.
(3) Ms. Holles was appointed as the Chief Executive Officer on August 9, 2021. The salary reported reflects the pro rata portion of Ms. Holles' annual salary of $500,000 earned from commencement of her employment through December 31, 2021.
(4) Dr. Davis served as our Chief Operating Officer until May 2022.
(5) Dr. Yoo served as our Chief Medical Officer until May 2022.
(6) Mr. Michael Gladstone previously served as our President and Chief Executive Officer from June 4, 2019 to August 9, 2021. Mr. Gladstone did not receive any compensation for his service as our Chief Executive Officer.

### Annual Performance-Based Bonuses

Annual bonuses for our executive officers are based on the achievement of corporate and individual performance objectives. For the 2021 bonuses, the corporate performance objectives included certain development goals and milestones. The 2021 target bonus amounts, expressed as a percentage of annual base salary, for Ms. Holles, Dr. Davis and Dr. Yoo were 50%, 35% and 35%, respectively. In February, our board of directors met to review performance against the 2021 bonus goals and approved cash bonuses for the named executive officers in the amounts set forth in the "Non-Equity Incentive Plan Compensation" column of the "Summary Compensation Table" above.

### Outstanding Equity Awards at 2021 Fiscal Year-End Table

The following table summarizes the number of shares of common stock underlying outstanding equity incentive plan awards for each of our named executive officers as of December 31, 2021.

| | | Option Awards | | | | Stock Awards | |
|---|---|---|---|---|---|---|---|
| Name | Grant Date[1] | Number of Securities Underlying Unexercised Options Exercisable | Number of Securities Underlying Unexercised Options Unexercisable | Option Exercise Price($) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested(#) | Market Value of Shares of Units of Stock That Have Not Vested($)[2] |
| Natalie Holles | 08/09/2021[3] | — | — | — | — | 1,076,178 | 9,918,835 |
| *Chief Executive Officer* | 08/09/2021[4] | — | — | — | — | 142,658 | 1,314,841 |
| Howard E. Davis, Jr., Ph.D. | 06/01/2020[5] | — | — | — | — | 174,189 | 1,605,443 |
| *Former Chief Operating Officer* | 04/02/2021[6] | — | 9,316 | 1.44 | 04/01/2031 | — | — |
| Stephen Yoo, M.D. | 09/26/2019[7] | — | — | — | — | 135,988 | 1,253,339 |
| *Former Chief Medical Officer* | 06/07/2020[8] | — | — | — | — | 28,753 | 264,996 |
| | 04/02/2021[9] | — | 11,824 | 1.44 | 04/01/2031 | — | — |
| Michael Gladstone | — | — | — | — | — | — | — |
| *Former President and Chief Executive Officer* | | | | | | | |

(1) All outstanding equity awards were granted under the 2019 Plan.
(2) There was no public market for our common stock as of December 31, 2021. The fair market value of our common stock as of December 31, 2021, as determined by an independent valuation, was $9.21 per share.
(3) Represents a restricted stock award subject to our right of repurchase. The repurchase right lapses pursuant to the stock award's vesting schedule, which is as follows: 25% of the shares underlying the stock award shall vest on August 9, 2022 and the remaining 75% of the shares underlying the stock award vest in equal quarterly installments over 36 months thereafter, subject to Ms. Holles' continued service to us.
(4) Represents a restricted stock award subject to our right of repurchase. The repurchase right lapses pursuant to the stock award's vesting schedule, which is as follow: following the date of our Series A-2 Preferred Stock Financing, (i) 35,664 of the shares underlying the stock award shall vest on August 9, 2021, and (ii) 106,994 of the shares underlying the stock award vest in equal quarterly installments over 36 months thereafter, subject to Ms. Holles' continued service to us.
(5) Represents a restricted stock award subject to our right of repurchase as to the unvested portion. The repurchase right lapses pursuant to the stock award's vesting schedule, which is as follows: 25% of the shares underlying the stock award vested on June 1, 2021 and the remaining 75% of the shares underlying the stock award vest in equal quarterly installments over 36 months thereafter, subject to Dr. Davis' continued service to us.
(6) The vesting schedule for the option is as follows: the option shall vest in equal quarterly installments of 6.25% until the fourth anniversary of the Second Tranche Closing (as defined in the Series A-3 Preferred Stock Purchase Agreement dated as of February 24, 2021), with the first quarterly installment vesting on the date three months after the Second Tranche Closing, subject to Dr. Davis' continued service to us.
(7) Represents a restricted stock award subject to our right of repurchase as to the unvested portion. The repurchase right lapses pursuant to the stock award's vesting schedule, which is as follows: 25% of the shares underlying the stock award vested on September 30, 2020 and the remaining 75% of the shares underlying the stock award vest in equal quarterly installments over 36 months thereafter, subject to Dr. Yoo's continued service to us.
(8) Represents a restricted stock award subject to our right of repurchase as to the unvested portion. The repurchase right lapses pursuant to the stock award's vesting schedule, which is as follows: 6% of the shares underlying the stock award vested on September 30, 2020 and the remaining 92% of the shares underlying the stock award vest in equal quarterly installments over 44 months thereafter, subject to Dr. Yoo's continued service to us.
(9) The vesting schedule for the option is as follows: the option shall vest in equal quarterly installments of 6.25% until the fourth anniversary of the Second Tranche Closing (as defined in the Series A-3 Preferred Stock Purchase Agreement dated as of February 24, 2021), with the first quarterly installment vesting on the date three months after the Second Tranche Closing, subject to Dr. Yoo's continued service to us.

### Employment Agreements

#### *Natalie Holles Employment Offer Letter Agreement*

We are party to an offer letter agreement with Natalie Holles, dated August 24, 2022 (the "Holles Offer Letter"), which amends and restates her employment agreement with us dated July 2, 2021. Pursuant to the Holles Offer Letter, Ms. Holles is an "at-will" employee without a set term and entitled to an annualized initial base salary of $500,000, and eligible for an annual incentive bonus of up to 50% of her annualized base salary. Additionally, we have paid Ms. Holles a one-time special bonus of $1,867,102 (the "Special Bonus"). The Special Bonus is subject to a three-year vesting schedule with six-month cliffs, as well as her continued

employment with us on the relevant vesting dates, and was paid to offset Ms. Holles' tax liability as a result of the forgiveness of the promissory note from Ms. Holles prior to the filing of this registration statement. See the section titled "Certain Relationships and Related Party Transactions—Loans to Executive Officers" for additional information.

***Potential Payments upon Termination and Change of Control***

In connection with this offering, in July 2022, our board of directors approved the terms of an Executive Officer Severance Policy, to be effective upon the completion of this offering. Under this policy, each of our officers, including our named executive officers, has entered or will enter into a participation agreement pursuant to which he or she will become a beneficiary of our Executive Officer Severance Policy, or the COC Policy.

Pursuant to the COC Policy and her participation agreement, in the event that our Chief Executive Officer is terminated without "cause" or resigns for "good reason" (A) within three months before or (B) 12 months following a "change of control" of the Company, but as to part (A) only if the "separation" occurs after a "potential change in control" (as such terms are defined in the COC Policy), Natalie Holles will be entitled to: (i) an amount equal to 18 months of her base salary at the rate in effect immediately prior to such termination; (ii) an amount equal to 150% of her target bonus in effect immediately prior to such termination; (iii) a pro-rata portion of her annual bonus for the fiscal year in which her termination occurs; (iv) the Special Bonus will accelerate and become fully vested, with the payments mentioned in (i) to (iii) to be paid in a cash lump sum; and (v) to the extent she timely elects to receive continued coverage under our group healthcare plans, we will pay the full cost of such continued coverage for a period ending on the earlier of (x) 18 months following the termination date and (y) the date that she becomes eligible for coverage under another employer's plans. In addition, each of the Chief Executive Officer's outstanding equity awards, excluding awards that would otherwise vest upon satisfaction of performance criteria (including, for the avoidance of doubt, any awards subject to both performance-based and time-based vesting criteria), will become vested and exercisable, as applicable, with respect to 100% of the underlying shares subject to time-based vesting. For the avoidance of doubt, any outstanding equity awards subject to performance-based vesting will continue to be subject to the applicable performance-based vesting condition set forth in such equity award. All such severance payments, benefits and vesting acceleration are subject to each named executive officer's execution of a general release of claims against us.

Additionally, in the event that our Chief Executive Officer is terminated without "cause" or resigns for "good reason" outside of the period three months before or 12 months after a "change of control" (as such terms are defined in the COC Policy), Ms. Holles will be entitled to (i) an amount equal to 12 months of her base salary at the rate in effect immediately prior to such termination to be received in equal installments over 12 months; (ii) a pro-rata portion of her annual bonus for the fiscal year in which her termination occurs to be paid in a cash lump sum; and (iii) to the extent she timely elects to receive continued coverage under our group healthcare plans, we will pay the full cost of such continued coverage for a period ending on the earlier of (x) 12 months following the termination date and (y) the date that she becomes eligible for coverage under another employer's plans. In addition, each of the Chief Executive Officer's outstanding equity awards, excluding awards that would otherwise vest upon satisfaction of performance criteria (including, for the avoidance of doubt, any awards subject to both performance-based and time-based vesting criteria) will become vested and exercisable, as applicable, with respect to 12 additional months of vesting credit of the underlying shares subject to time-based vesting. For the avoidance of doubt, any outstanding equity awards subject to performance-based vesting will continue to be subject to the applicable performance-based vesting condition set forth in such equity award. All such severance payments, benefits and vesting acceleration are subject to the chief executive officer's execution of a general release of claims against us.

In the event that an executive officer of the Company (other than the Chief Executive Officer) is terminated without "cause" or resigns for "good reason" (A) within three months before or (B) 12 months following a "change of control" of the Company, but as to part (A) only if the "separation" occurs after a "potential change in

control" (as such terms are defined in the COC Policy), such executive officer will be entitled to: (i) an amount equal to 12 months of his or her base salary at the rate in effect immediately prior to such termination; (ii) an amount equal to 100% of his or her target bonus in effect immediately prior to such termination with the payments mentioned in (i) and (ii) to be paid in a cash lump sum; and (iii) to the extent he or she timely elects to receive continued coverage under our group healthcare plans, we will pay the full cost of such continued coverage for a period ending on the earlier of (x) 12 months following the termination date and (y) the date that he or she becomes eligible for coverage under another employer's plans. In addition, each of the executive officer's outstanding equity awards, excluding awards that would otherwise vest upon satisfaction of performance criteria (including, for the avoidance of doubt, any awards subject to both performance-based and time-based vesting criteria) will become vested and exercisable, as applicable, with respect to 100% of the underlying shares subject to time-based vesting. For the avoidance of doubt, any outstanding equity awards subject to performance-based vesting will continue to be subject to the applicable performance-based vesting condition set forth in such equity award. All such severance payments, benefits and vesting acceleration are subject to such executive officer's execution of a general release of claims against us.

Additionally, in the event that an executive officer (other than the Chief Executive Officer) is terminated without "cause" or resigns for "good reason" outside of the period three months before or 12 months after a "change of control" (as such terms are defined in the COC Policy), he or she will be entitled to (i) an amount equal to 9 months of his or her base salary at the rate in effect immediately prior to such termination, to be received in equal installments over 9 months and (ii) to the extent he or she timely elects to receive continued coverage under our group healthcare plans, we will pay the full cost of such continued coverage for a period ending on the earlier of (x) 9 months following the termination date and (y) the date that he or she becomes eligible for coverage under another employer's plans. All such severance payments and benefits are subject to such named executive officer's execution of a general release of claims against us.

**Equity Compensation Plans and Other Benefit Plans**

We believe that our ability to grant equity-based awards is a valuable compensation tool that enables us to attract, retain and motivate our employees, consultants and directors by aligning their financial interests with those of our stockholders. The principal features of our equity plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which are filed as exhibits to the registration statement of which this prospectus is a part.

***2019 Stock Incentive Plan***

Our 2019 Plan was initially adopted by our board of directors and approved by our stockholders in June 2019. The 2019 Plan was amended most recently on August 9, 2022.

*Share Reserve*. As of August 26, 2022, we had 5,317,559 shares of our common stock reserved for issuance pursuant to grants under our 2019 Plan, of which 1,036,951 remained available for grant. As of August 26, 2022, no options to purchase shares of common stock had been exercised and options to purchase 1,884,197 shares remained outstanding, with a weighted-average exercise price of $7.55 per share. As of August 26, 2022, 2,396,410 shares of restricted stock granted under our 2019 Plan were outstanding, of which 1,286,653 shares remain subject to repurchase. No other types of awards have been granted under the 2019 Plan. The 2019 Plan will terminate on the date that the 2022 Plan becomes effective (as described below) and no additional grants will be made pursuant to the 2019 Plan following its termination. However, any outstanding options and shares of restricted stock will remain outstanding until they are exercised, as applicable, or are terminated in accordance with the terms of the 2019 Plan and the applicable award agreements evidencing such awards.

*Administration*. Our board of directors, or a committee thereof appointed by our board of directors, referred to as the Committee, administers the 2019 Plan and the awards granted thereunder. Subject to the terms of the

2019 Plan, the Committee has the authority to, among other things, select the persons to whom awards will be granted, construe and interpret our 2019 Plan as well as to amend, modify, suspend or terminate rules and regulations relating to the 2019 Plan.

*Eligibility*. The 2019 Plan provides for the grant of both Incentive Stock Options (ISOs), within the meaning of Section 422 of the Code, which qualify for favorable tax treatment to their recipients under the Code, and Nonqualified Stock Option (NQSOs), as well as for the issuance of Restricted Stock Units (RSUs), Stock Appreciation Rights (SARs), Restricted Stock and other stock-based awards (as defined in the 2019 Plan). We may grant ISOs only to our employees. We may grant NQSOs, RSUs, SARs, Restricted Stock and other stock-based awards to our employees, officers, directors, advisors and consultants (as such terms consultants and advisors are defined and interpreted for purposes of Rule 701 under the Securities Act of 1933, as amended (or any successor rule)). Only stock options and Restricted Stock have been granted under the 2019 Plan. We refer to employees, officers, directors, advisors or consultants who receive an award under our 2019 Plan as participants.

*Options*. The 2019 Plan provides for the grant of both (1) ISOs, intended to qualify for tax treatment under Section 422 of the Code which may be granted only to employees and (2) NQSOs, which may be granted to our employees, officers, directors, advisors and consultants, each at a stated exercise price and subject to certain vesting and other terms and conditions as set forth in the 2019 Plan. The 2019 Plan provides that the exercise price of each stock option must be at least equal to the fair market value of our common stock on the date of grant. In addition, the exercise price of any ISO granted to a participant who owns more than ten percent of the total combined voting power of all classes of our capital stock, directly or by attribution, must be at least equal to 110% of the fair market value of our common stock on the date of grant. The maximum permitted term of options granted under our 2019 Plan is ten years from the date of grant, except that the maximum permitted term of ISOs granted to a participant who owns more than ten percent of the total combined voting power of all classes of our capital stock, directly or by attribution, is five years from the date of grant.

*Restricted Stocks and RSUs*. The 2019 Plan provides for the grant of Restricted Stocks and RSUs, with terms as generally determined by the Committee (in accordance with the 2019 Plan) and to be set forth in an award agreement. Among other terms and conditions, we may retain an option to repurchase the unvested restricted stock at any time following the holder's termination of service. A Restricted Stock is an offer by us to sell shares of our common stock subject to restrictions, which may lapse based on the satisfaction of service or achievement of performance conditions. The price, if any, of a Restricted Stock will be determined by the Committee. Holders of Restricted Stocks, unlike holders of options, will have the right to vote and any dividends or stock distributions paid pursuant to Restricted Stocks will be accrued and paid when the restrictions on such shares lapse. RSUs represent the right to receive shares of our common stock at a specified date in the future and may be subject to vesting based on service or achievement of performance conditions. Payment of earned RSUs will be made as soon as practicable on a date determined at the time of grant, and may be settled in cash, shares of our common stock or a combination of both.

*Stock Appreciation Rights*. The 2019 Plan provides for the grant of SARs at a stated exercise price. The exercise value of a SAR is based upon the difference between the fair market value of our common stock on the date of exercise and a pre-determined exercise price, multiplied by the number of shares with respect to which the SAR is being exercised. The exercise price of each SAR must be at least equal to the fair market value of our common stock on the date of grant and may either be settled in cash or shares of our common stock or a combination thereof, as determined by the Committee. The Committee will determine the vesting schedule applicable to each SAR. The maximum permitted term of SARs granted under the 2019 Plan is ten years from the date of grant.

*Other Stock-Based Awards*. Our board of directors may grant other awards of shares of common stock, and other awards that are valued in whole or in part by reference to, or are otherwise based on, shares of common stock or other property. Such other stock-based awards will also be available as a form of payment in the

settlement of other awards granted under the 2019 Plan or as payment in lieu of compensation to which a participant is otherwise entitled. Other stock-based awards may be paid in shares of common stock or cash, as our board of directors will determine. Subject to the provisions of the 2019 Plan, our board of directors will determine the terms and conditions of each other stock-based award, including any applicable purchase price.

*Limited Transferability*. Awards (or any interest in an award, including, prior to exercise, any interest in shares of common stock issuable upon exercise of an option or SAR) will not be sold, assigned, transferred, pledged, hypothecated or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, and, during the life of the participant, will be exercisable only by the participant; except that awards, other than awards subject to Section 409A of the Code, may be transferred to family members (as defined in Rule 701(c)(3) under the Securities Act) through gifts or (other than ISOs) domestic relations orders or to an executor or guardian upon the death or disability of the participant.

*Change in Control.*

– *Consequences on Awards Other Than Restricted Stock*. In connection with a "Reorganization Event" (as defined below), our board of directors may take any one or more of the following actions: (i) provide that such awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) provide that all of the participant's unexercised and/or unvested awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the participant, (iii) provide that outstanding awards will become exercisable, or restrictions applicable to an award will lapse, prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of common stock will receive upon closing a cash payment for each share surrendered in the Reorganization Event, make or provide for a cash payment with respect to each award held by a participant, (v) provide that, in connection with a liquidation or dissolution of the Company, awards will convert into the right to receive liquidation proceeds, and (vi) any combination of the foregoing. Our board of directors will not be obligated by the 2019 Plan to treat all awards held by a participant, or all awards of the same type, identically.

– *Consequences on Restricted Stock*. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company with respect to outstanding Restricted Stock shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the common stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to such Restricted Stock. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock or any other agreement between a participant and the Company, all restrictions and conditions on all Restricted Stock then outstanding shall automatically be deemed terminated or satisfied.

A "Reorganization Event" is defined in the 2019 Plan as (a) any merger or consolidation of the Company with or into another entity as a result of which all of the common stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the common stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

*Adjustments*. In the event of any stock dividend, recapitalization, stock split, reverse stock split, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of common stock other than an ordinary cash dividend, (i) the number and class of securities available under the 2019 Plan, (ii) the number and class of securities and exercise price per share of each outstanding option, (iii) the share and per-share provisions and the measurement price of each outstanding

SAR, (iv) the number of shares subject to and the repurchase price per share subject to each outstanding award of Restricted Stock and (v) the share and per-share-related provisions and the purchase price, if any, of each outstanding award of RSU and each outstanding other stock-based award, will be equitably adjusted by the Company (or substituted awards may be made, if applicable) in the manner determined by our board of directors, in each case to prevent diminution or enlargement of the benefits or potential benefits intended to be made under the 2019 Plan.

*Amendment; Termination*. Our board of directors may amend, suspend or terminate the 2019 Plan or any portion thereof at any time; *provided that* if at any time the approval of our stockholders is required as to any modification or amendment under Section 422 of the Code or any successor provision with respect to ISOs, our board of directors may not effect such modification or amendment without such approval.

***2022 Equity Incentive Plan***

We have adopted our 2022 Plan, which will become effective on the date of the effectiveness of the registration statement, or 2022 Plan Effective Date, for which this prospectus form a part and will serve as the successor to our 2019 Plan. Our 2022 Plan authorizes the award of incentive stock options (ISOs), which are intended to qualify for tax treatment under Section 422 of the Code, and non-qualified stock options (NQSOs), Restricted Stock Awards (RSAs), Stock Appreciation Rights (SARs), Restricted Stock Units (RSUs), performance awards and stock bonus awards. We have initially reserved 4,426,737 shares of our common stock (subject to adjustment as provided in the 2022 Plan), plus such number of shares equal to (i) any reserved shares not issued or subject to outstanding grants under the 2019 Plan on the 2022 Plan Effective Date, (ii) shares of our common stock that are subject to outstanding awards granted under the 2019 Plan that cease to be subject to such awards by forfeiture or otherwise after the 2022 Plan Effective Date, (iii) shares of our common stock issued under the 2019 Plan that are repurchased by the us at the original issue price, (iv) shares of our common stock issued under the 2019 Plan, before or after the 2022 Plan Effective Date pursuant to the exercise of stock-options that are, after the 2022 Plan Effective Date, forfeited and (v) shares of our common stock that are subject to outstanding awards granted under the 2019 Plan that are used to pay the exercise price of an option or withheld to satisfy any tax withholding obligations related to any award. The number of shares reserved for issuance under our 2022 Plan will increase automatically on January 1 of each of 2023 through 2032 by the number of shares equal to the lesser of 5% of the aggregate number of shares of all classes of our common stock, plus the total number of shares of our common stock issuable upon conversion of any preferred stock (if any) or exercise of any pre-funded warrants, as issued and outstanding as of the immediately preceding December 31, or a number as may be determined by our board of directors. Pursuant to the 2022 Plan, ISOs may be granted only to our employees. We may grant all other types of awards to our employees, directors and consultants.

In addition, the following shares will again be available for issuance pursuant to awards granted under our 2022 Plan:

- shares subject to options or SARs granted under our 2022 Plan that cease to be subject to the option or SAR for any reason other than exercise of the option or SAR;
- shares subject to awards granted under our 2022 Plan that are subsequently forfeited or repurchased by us at the original issue price;
- shares subject to awards granted under our 2022 Plan that otherwise terminate without such shares being issued;
- shares subject to awards granted under our 2022 Plan that are surrendered, cancelled or exchanged for cash or a different award (or combination thereof);
- shares subject to awards granted under our 2022 Plan that are surrendered pursuant to an “exchange program” (as defined in our 2022 Plan);

- shares issuable upon the exercise of options or subject to other awards granted under our 2019 Plan that cease to be subject to such options or other awards, by forfeiture or otherwise, after, in the case of awards under the 2019 Plan, the termination of the 2019 Plan;

- shares issued under the 2019 Plan before or after the effective date of the 2022 Plan pursuant to the exercise of stock options that are, after the effective date, forfeited;

- shares subject to awards granted under our 2019 Plan that are forfeited or repurchased by us at the original price after, in the case of awards under the 2019 Plan, the termination of the 2019 Plan; and

- shares subject to awards under our 2019 Plan or our 2022 Plan that are used to pay the exercise price of an option or withheld to satisfy the tax withholding obligations related to any award.

*Administration*. Our 2022 Plan is expected to be administered by our compensation committee, all of the members of which are outside directors as defined under applicable federal tax laws, or by our board of directors acting in place of our compensation committee. Subject to the terms and conditions of the 2022 Plan, the compensation committee will have the authority, among other things, to select the persons to whom awards may be granted, construe and interpret our 2022 Plan as well as to determine the terms of such awards and prescribe, amend and rescind the rules and regulations relating to the 2022 Plan or any award granted thereunder. The 2022 Plan provides that our board of directors or compensation committee may delegate its authority, including the authority to grant awards, to one or more executive officers to the extent permitted by applicable law, *provided that* awards granted to non-employee directors may only be determined by our board of directors.

*Eligibility*. Our 2022 Plan provides for the grant of awards to our employees, directors, consultants, independent contractors and advisors.

*Options*. Our 2022 Plan provides for the grant of both ISOs intended to qualify under Section 422 of the Code, and NQSOs to purchase shares of our common stock at a stated exercise price. ISOs may only be granted to employees, including officers and directors who are also employees. The exercise price of stock options granted under the 2022 Plan must be at least equal to the fair market value of our common stock on the date of grant. In addition, ISOs granted to an individual who holds, directly or by attribution, more than ten percent of the total combined voting power of all classes of our capital stock must have an exercise price of at least 110% of the fair market value of our common stock on the date of grant. Subject to stock splits, dividends, recapitalizations or similar events, no more than 22,133,687 shares (subject to adjustment as provided in the 2022 Plan and as a result of the 1-for-2.259 reverse stock split of our outstanding common stock, which was effected on September 7, 2022) may be issued pursuant to the exercise of incentive stock options granted under the 2022 Plan.

Options may vest based on service or achievement of performance conditions. Our compensation committee may provide for options to be exercised only as they vest or to be immediately exercisable, with any shares issued on exercise being subject to our right of repurchase that lapses as the shares vest. In the event of a participant's termination of service, an option is generally exercisable, to the extent vested, for a period of three months in the case of termination other than due to "cause" or the participant's death or "disability" (as such terms are defined in our 2022 Plan), or 12 months in the case of termination due to the participant's death or disability, or such longer or shorter period as the compensation committee may provide, but in any event no later than the expiration date of the stock option. Stock options generally terminate upon a participant's termination of employment for cause. The maximum term of options granted under our 2022 Plan is ten years from the date of grant, except that the maximum permitted term of ISOs granted to an individual who holds, directly or by attribution, more than ten percent of the total combined voting power of all classes of our capital stock is five years from the date of grant.

Upon exercise of options, the option exercise price must be paid in full either in cash or cash equivalents or in other manners approved by the compensation committee, including by surrender of shares of our common

stock that are beneficially owned by the optionee free of restrictions. Subject to applicable law, the exercise price may also be paid by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or check sufficient to pay the exercise price and any required tax withholding.

*Restricted Stock Awards*. An RSA is an offer by us to sell shares of our common stock subject to restrictions, which may lapse based on the satisfaction of service or achievement of performance conditions. The price, if any, of an RSA will be determined by the compensation committee. Holders of RSAs will have the right to vote and any dividends or stock distributions paid pursuant to unvested RSAs will be accrued and paid when the restrictions on such shares lapse. If any such dividends or distributions are paid in shares of our common stock, the shares will be subject to the same restrictions on transferability and forfeiture as the shares of restricted stock with respect to which they were paid. Unless otherwise determined by the compensation committee at the time of award, vesting will cease on the date the participant no longer provides services to us and unvested RSAs may be forfeited to or repurchased by us.

*Stock Appreciation Rights*. A SAR provides for a payment, in cash or shares of our common stock (up to a specified maximum of shares, if determined by our compensation committee), to the holder based upon the difference between the fair market value of our common stock on the date of exercise and a predetermined exercise price, multiplied by the number of shares. The exercise price of a SAR must be at least the fair market value of a share of our common stock on the date of grant. SARs may vest based on service or achievement of performance conditions and may not have a term that is longer than ten years from the date of grant.

*Restricted Stock Units*. RSUs represent the right to receive shares of our common stock at a specified date in the future and may be subject to vesting based on service or achievement of performance conditions. Payment of earned RSUs will be made as soon as practicable on a date determined at the time of grant, and may be settled in cash, shares of our common stock or a combination of both. No RSU may have a term that is longer than ten years from the date of grant.

*Performance Awards*. Performance awards granted to pursuant to the 2022 Plan maybe in the form of a cash bonus, or an award of performance shares or performance units denominated in shares of our common stock that may be settled in cash, property or by issuance of those shares subject to the satisfaction or achievement of specified performance conditions.

*Stock Bonus Awards*. A stock bonus award provides for payment in the form of cash, shares of our common stock or a combination thereof, based on the fair market value of shares subject such award as determined by our compensation committee. The awards may be granted as consideration for services already rendered, or at the discretion of the compensation committee, may be subject to vesting restrictions based on continued service or performance conditions.

*Dividend Equivalents Rights*. Dividend equivalent rights maybe granted at the discretion of our compensation committee and represent the right to receive the value of dividends, if any, paid by us in respect of the number of shares of our common stock underlying an award. Dividend equivalent rights will be subject to the same vesting or performance conditions as the underlying award, subject to the discretion of the compensation committee, and may be paid only at such time as the underlying award has become fully vested. Dividend equivalent rights may be settled in cash, shares or other property, or a combination of thereof as determined by our compensation committee. No dividend equivalent rights will be paid in respect of options or SARs.

*Change of Control*. Our 2022 Plan provides that, in the event of a “corporate transaction” (as defined in the 2022 Plan), outstanding awards under the 2022 Plan shall be subject to the agreement evidencing the corporate

transaction, which need not treat all outstanding awards in an identical manner, and may include one or more of the following actions: (i) the continuation of outstanding awards; (ii) the assumption of outstanding awards by the successor or acquiring entity or its parent; (iii) the substitution of outstanding awards by the successor or acquiring entity or its parent with equivalent awards with substantially the same terms; (iv) the full or partial acceleration of exercisability, vesting, or lapse of forfeiture conditions, including our right to repurchase shares and accelerated expiration of the award; (v) the settlement of the full value of the outstanding awards (whether or not then vested or exercisable) in cash, cash equivalents, or securities of the successor entity with a fair market value equal to the required amount, as determined in accordance with the 2022 Plan, which may be deferred until the date or dates the award would have become exercisable or vested; or (vi) the cancellation of the outstanding awards for no consideration. Notwithstanding the foregoing, upon a corporate transaction, the vesting of all awards granted to our non-employee directors will accelerate and such awards will become exercisable (to the extent applicable) in full prior to the consummation of a corporate transaction at such times and on such conditions as the compensation committee determines.

*Adjustment*. In the event of a change in the number of outstanding shares of our common stock without consideration by reason of a stock dividend, extraordinary dividend or distribution (whether in cash, shares, or other property, other than a regular cash dividend), recapitalization, stock split, reverse stock split, subdivision, combination, consolidation reclassification, spin-off or similar change in our capital structure, without consideration, appropriate proportional adjustments will be made to the number of shares reserved for issuance under our 2022 Plan; the exercise prices, number and class of shares subject to outstanding options or SARs; the number and class of shares subject to other outstanding awards; and any applicable maximum award limits with respect to incentive stock options.

*Exchange, Repricing and Buyout of Awards*. Our compensation committee may, without prior stockholder approval, (i) reduce the exercise price of outstanding options or SARs without the consent of any participant and (ii) pay cash or issue new awards in exchange for the surrender and cancellation of any, or all, outstanding awards, subject to the consent of any affected participant to the extent required by the terms of the 2022 Plan.

*Director Compensation Limits*. No non-employee director may receive awards under our 2022 Plan with a grant date value that when combined with cash compensation received for his or her service as a director after the effective date of the 2022 Plan, exceeds $1,000,000 in any calendar year or $1,500,000 in his or her initial year of service as a non-employee director with us.

*Clawback; Transferability*. All awards will be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by our board of directors (or a committee thereof) or required by law during the term of service of the award holder, to the extent set forth in such policy or applicable agreement. Except in limited circumstances, awards granted under our 2022 Plan may generally not be transferred in any manner prior to vesting other than by will or by the laws of descent and distribution.

*Sub-Plans*. Subject to the terms of the 2022 Plan, the compensation committee may establish one or more sub-plans under the 2022 Plan and/or modify the terms of awards granted to participants outside of the United States to comply with any laws or regulations applicable to any such jurisdiction.

*Amendment and Termination*. Our board of directors may amend our 2022 Plan at any time, subject to stockholder approval as may be required. Our 2022 Plan will terminate ten years from the date our board of directors adopts the plan, unless it is terminated earlier by our board of directors. No termination or amendment of the 2022 Plan may adversely affect any then-outstanding award without the consent of the affected participant, except as is necessary to comply with applicable laws or as otherwise provided by the terms of the 2022 Plan.

***2022 Employee Stock Purchase Plan***

We have adopted our ESPP, which will become effective on the date of the effectiveness of the registration statement of which this prospectus forms a part, or ESPP Effective Date, in order to enable eligible employees to

purchase shares of our common stock with accumulated payroll deductions at a discount beginning on a date to be determined by our board of directors or our compensation committee. Our ESPP is intended to qualify under Section 423 of the Code *provided that* the compensation committee may adopt sub-plans under our ESPP designed to be outside of the scope of Section 423 of the Code for participants who are non-U.S. residents.

*Shares Available*. We have initially reserved 369,079 shares of our common stock for sale under our ESPP (subject to adjustment as provided in the 2022 Plan). The aggregate number of shares reserved for sale under our ESPP will increase automatically on January 1st of each of 2023 through 2032 by the number of shares equal to the lesser of 1% of the aggregate number of shares of all classes of our common stock, plus the total number of shares of our common stock issuable upon conversion of any preferred stock (if any) or exercise of any pre-funded warrants, as issued and outstanding as of the immediately preceding December 31 (rounded to the nearest whole share) or a number of shares as may be determined by our board of directors in any particular year. The aggregate number of shares issued over the term of our ESPP, subject to stock-splits, recapitalizations or similar events, may not exceed 7,381,584 shares of our common stock (subject to adjustment as provided in the 2022 Plan).

*Administration*. Our ESPP is expected to be administered by our compensation committee, or by our board of directors acting in place of our compensation committee. Among other things, the administrator will have the authority to determine eligibility for participation in the ESPP, designate separate offerings under the plan, and construe, interpret and apply the terms of the plan.

*Eligibility*. Employees eligible to participate in any offering pursuant to the ESPP generally include any employee that is employed by us or certain of our designated subsidiaries at the beginning of the offering period. However, our compensation committee may determine that employees who have been employed for less than such time period as specified by the administrator, are customarily employed for 20 hours or less per week, or for five months or less in a calendar year, or certain highly-compensated employees as determined in accordance with applicable tax laws, may not be eligible to participate in the ESPP. In addition, any employee who owns (or is deemed to own as a result of attribution) 5% or more of the total combined voting power or value of all classes of our capital stock, or the capital stock of one of our qualifying subsidiaries, or who will own such amount as a result of participation in the ESPP, will not be eligible to participate in the ESPP. Our compensation committee may impose additional restrictions on eligibility from time to time.

*Offerings*. Under our ESPP, eligible employees will be offered the option to purchase shares of our common stock at a discount over a series of offering periods, which may be consecutive or overlapping, through accumulated payroll deductions over the period. Each offering period may itself consist of one or more purchase periods. No offering period may be longer than 27 months. The administrator may determine to permit participants to suspend or restart contributions during any offering period. The purchase price for shares purchased under our ESPP during any given purchase period will be 85% of the lesser of the fair market value of our common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of the purchase period.

*Participation*. Participating employees will be able to purchase the offered shares of our common stock by accumulating funds through payroll deductions. Participants may select a rate of payroll deduction between 1% and 15% of their compensation. However, a participant may not purchase more than 3,000 shares during any one purchase period (subject to adjustment as provided in the 2022 Plan and as a result of the 1-for-2.259 reverse stock split of our outstanding common stock, which was effected on September 7, 2022), and may not subscribe for more than $25,000 in fair market value of shares of our common stock (determined as of the date the offering period commences) in any calendar year in which the offering is in effect. The administrator, in its discretion, may set a lower maximum amount of shares which may be purchased.

See the section titled “Executive Compensation—Employment Agreements” for additional information

The purchase price for shares of our common stock purchased under the ESPP will be 85% of the lesser of the fair market value of our common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of each purchase period in the applicable offering period.

Once an employee becomes a participant in an offering period, the participant will be automatically enrolled in each subsequent offering period at the same contribution level. A participant may reduce his or her contribution in accordance with procedures set forth by the compensation committee and may withdraw from participation in the ESPP at any time prior the end of an offering period, or such other time as may be specified by the compensation committee. Upon withdrawal, the accumulated payroll deductions will be returned to the participant without interest.

*Adjustments Upon Recapitalization*. If the number of outstanding shares of our common stock is changed by stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification or similar change in our capital structure without consideration, then our compensation committee will proportionately adjust the number and class of common stock that is available under the ESPP, the purchase price and number of shares any participant has elected to purchase as well as the maximum number of shares which may be purchased by participants.

*Change of Control*. If we experience a change of "control transaction" (as defined in our ESPP), any offering period that commenced prior to the closing of the proposed change of control transaction will be shortened and terminated on a new purchase date. The new purchase date will occur on or prior to the closing of the proposed change of control transaction, and our ESPP will then terminate on the closing of the proposed change of control.

*Transferability*. A participant may not assign, transfer, pledge or otherwise dispose of payroll deductions credited to his or her account, or any rights with regard to an election to purchase shares pursuant to the ESPP other than by will or the laws of descent or distribution.

*Amendment; Termination*. The administrator may amend, suspend or terminate the ESPP at any time without stockholder consent, except to the extent such amendment would increase the number of shares available for issuance under our ESPP, change the class or designation of employees eligible for participation in the plan or otherwise as required by law. If our ESPP is terminated, the administrator may elect to terminate all outstanding offering periods immediately, upon next purchase date (which may be sooner than originally scheduled) or upon the last day of such offering period. If any offering period is terminated prior to its scheduled completion, all amounts credited to participants which have not been used to purchase shares will be returned to participants as soon as administratively practicable. Our ESPP will continue until the earlier to occur of (a) termination of the ESPP by our board of directors, (b) issuance of all of the shares reserved for issuance under the ESPP, or (c) the tenth anniversary of the effective date under the ESPP.

***401(k) Plan***

We sponsor a retirement savings plan that is intended to qualify for favorable tax treatment under Section 401(a) of the Code and contains a cash or deferred feature that is intended to meet the requirements of Section 401(k) of the Code. Participants may make pre-tax and certain after-tax (Roth) salary deferral contributions to the plan from their eligible earnings up to the statutorily prescribed annual limit under the Code. Participants who are projected to reach 50 years of age or older during a calendar year may contribute additional amounts based on the statutory limits for catch-up contributions. Participant contributions are held in trust as required by law.

***Other Benefits***

Our named executive officers are eligible to participate in our employee benefit plans on the same basis as our other employees, including our health and welfare plans.

**Limitations on Liability and Indemnification Matters**

Our restated certificate of incorporation that will become effective in connection with the completion of this offering contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by the DGCL. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director derived an improper personal benefit.

Our restated certificate of incorporation and our restated bylaws that will become effective in connection with the completion of this offering require us to indemnify our directors and executive officers to the maximum extent not prohibited by the DGCL and allow us to indemnify other employees and agents as set forth in the DGCL.

We have entered, and intend to continue to enter, into separate indemnification agreements with our directors, executive officers and certain of our key employees, in addition to the indemnification provided for in our restated certificate of incorporation and restated bylaws. These agreements, among other things, require us to indemnify our directors, executive officers and key employees for certain expenses, including attorneys' fees, judgments, penalties, fines and settlement amounts actually incurred by these individuals in any action or proceeding arising out of their service to us or any of our subsidiaries or any other company or enterprise to which these individuals provide services at our request. Subject to certain limitations, our indemnification agreements also require us to advance expenses incurred by our directors, officers and key employees for the defense of any action for which indemnification is required or permitted.

We believe that these indemnification provisions and agreements are necessary to attract and retain qualified directors, executive officers and key employees. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our restated certificate of incorporation and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers 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 executive officers as required by these indemnification provisions.

At present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the compensation arrangements, including any employment, termination of employment and change in control arrangements, with our directors and executive officers, including those discussed in the sections titled "Management" and "Executive Compensation," the following is a description of each transaction since January 1, 2019 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amounts involved exceeded or will exceed the lesser of $120,000 and 1.0% of our total assets; and
- any of our directors, executive officers or holders of more than 5.0% of our capital stock, or an affiliate or immediate family member of the foregoing persons, had or will have a direct or indirect material interest.

Other than as described below, there have not been, nor are there any currently proposed, transactions or series of similar transactions to which we have been or will be a party other than compensation arrangements, which are described where required under the section titled "Executive Compensation."

### Series A-1 Preferred Stock Financing

In July 2019, we sold an aggregate of 8,000,000 shares of our Series A-1 convertible preferred stock, or Series A-1 Preferred Stock, to Atlas Venture Fund XI, L.P., at a purchase price of $1.00 per share for total gross proceeds to us of $8.0 million. Each share of our Series A-1 Preferred Stock will automatically convert into 0.4427 shares of our common stock immediately prior to the completion of this offering. Pursuant to our amended and restated investors' rights agreement, or IRA, holders of our Series A-1 Preferred Stock are entitled to certain registration rights. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

The following table summarizes the Series A-1 Preferred Stock purchased by members of our board of directors or their affiliates and holders of more than 5% of our outstanding capital stock. Please refer to the section titled "Principal Stockholders" for additional information regarding the shares held by these entities.

| Name of Stockholder | Shares of Series A-1 Preferred Stock | Total Cash Purchase Price($) |
|---|---|---|
| Atlas Venture Fund XI, L.P.(1) | 8,000,000 | $ 8,000,000 |

(1) Consists of shares purchased by Atlas Venture Fund XI, L.P., which is affiliated with Atlas Venture Opportunity Fund I, L.P. and together hold more than 5% of our outstanding capital stock. Michael Gladstone and Jason Rhodes, members of our board of directors, are affiliated with Atlas.

### Series A-2 Preferred Stock Financing

From July 2020 through February 2021, we sold an aggregate of 13,750,000 shares of our Series A-2 convertible preferred stock, or Series A-2 Preferred Stock, at a purchase price of $1.60 per share for total gross proceeds of $22.0 million. Each share of our Series A-2 Preferred Stock will automatically convert into 0.4427 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series A-2 Preferred Stock are titled to certain registration rights. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

The following table summarizes the Series A-2 Preferred Stock purchased by members of our board of directors or their affiliates and holders of more than 5% of our outstanding capital stock. The terms of these

purchases were the same for all purchasers of our Series A-2 Preferred Stock. Please refer to the section titled "Principal Stockholders" for additional information regarding the shares held by these entities.

| Name of Stockholder | Shares of Series A-2 Preferred Stock | Total Cash Purchase Price($) |
|---|---|---|
| Atlas Venture Fund XI, L.P.(1) | 5,156,250 | $ 8,250,000 |
| OrbiMed Private Investments VII, LP(2) | 8,593,750 | $ 13,750,000 |

(1) Consists of shares purchased by Atlas Venture Fund XI, L.P., which is affiliated with Atlas Venture Opportunity Fund I, L.P. and together hold more than 5% of our outstanding capital stock. Michael Gladstone and Jason Rhodes, members of our board of directors, are affiliated with Atlas.
(2) Consists of shares purchased by OrbiMed Private Investments VII, LP, which holds more than 5% of our outstanding capital stock. Dr. Bonita, a member of our board of directors, is a member of OrbiMed Advisors LLC, which is the managing member of the general partner of OrbiMed Private Investments VII, L.P.

**Series A-3 Preferred Stock Financing**

From February 2021 through November 2021, we sold an aggregate of 7,812,501 shares of our Series A-3 convertible preferred stock, or Series A-3 Preferred Stock, at a purchase price of $2.56 per share for total gross proceeds of $20.0 million. Each share of our Series A-3 Preferred Stock will automatically convert into 0.4427 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series A-3 Preferred Stock are entitled to certain registration rights. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

The following table summarizes the Series A-3 Preferred Stock purchased by members of our board of directors or their affiliates and holders of more than 5% of our outstanding capital stock. The terms of these purchases were the same for all purchasers of our Series A-3 Preferred Stock. Please refer to the section titled "Principal Stockholders" for additional information regarding the shares held by these entities.

| Name of Stockholder | Shares of Series A-3 Preferred Stock | Total Cash Purchase Price($) |
|---|---|---|
| Atlas Venture Fund XI, L.P.(1) | 1,464,844 | $ 3,750,000 |
| OrbiMed Private Investments VII, LP(2) | 2,441,407 | $ 6,250,000 |
| Biotechnology Value Fund, L.P. and affiliates(3) | 3,906,250 | $ 10,000,000 |

(1) Consists of shares purchased by Atlas Venture Fund XI, L.P., which is affiliated with Atlas Venture Opportunity Fund I, L.P. and together hold more than 5% of our outstanding capital stock. Michael Gladstone and Jason Rhodes, members of our board of directors, are affiliated with Atlas.
(2) Consists of shares purchased by OrbiMed Private Investments VII, LP, which holds more than 5% of our outstanding capital stock. Dr. Bonita, a member of our board of directors, is a member of OrbiMed Advisors LLC, which is the managing member of the general partner of OrbiMed Private Investments VII, L.P.
(3) Consists of shares purchased by Biotechnology Value Fund, L.P. and affiliates, which holds more than 5% of our outstanding capital stock.

**Series B Preferred Stock Financing**

In December 2021, we sold an aggregate of 14,091,686 shares of our Series B convertible preferred stock, or Series B Preferred Stock, at a price per share of $7.4512 for total gross proceeds of approximately $105.0 million. Each share of our Series B Preferred Stock will automatically convert into 0.4427 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series B Preferred Stock are entitled to certain registration rights. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

The following table summarizes the Series B Preferred Stock purchased by members of our board of directors or their affiliates and holders of more than 5% of our outstanding capital stock. The terms of these purchases were the same for all purchasers of our Series B Preferred Stock. Please refer to the section titled "Principal Stockholders" for additional information regarding the shares held by these entities.

| Name of Stockholder | Shares of Series B Preferred Stock | Total Cash Purchase Price($) |
|---|---|---|
| General Atlantic (TH), L.P.(1) | 4,026,197 | $ 29,999,999.09 |
| Atlas Venture Opportunity Fund I, L.P.(2) | 1,342,065 | $ 9,999,994.73 |
| OrbiMed Private Investments VII, LP(3) | 1,342,065 | $ 9,999,994.73 |
| Biotechnology Value Fund, L.P. and its affiliates(4) | 1,677,582 | $ 12,499,999.01 |

(1) Consists of shares purchased by General Atlantic (TH), L.P. General Atlantic (TH), L.P. holds more than 5% of our outstanding capital stock. Rob Perez, a member of our board of directors, is affiliated with General Atlantic.
(2) Consists of shares purchased by Atlas Venture Opportunity Fund I, L.P., which is affiliated with Atlas Venture Opportunity Fund I, L.P. and together hold more than 5% of our outstanding capital stock. Michael Gladstone and Jason Rhodes, members of our board of directors, are affiliated with Atlas.
(3) Consists of shares purchased by OrbiMed Private Investments VII, LP, which holds more than 5% of our outstanding capital stock. Dr. Bonita, a member of our board of directors, is a member of OrbiMed Advisors LLC, which is the managing member of the general partner of OrbiMed Private Investments.
(4) Consists of shares purchased by Biotechnology Value Fund, L.P. and affiliates, which holds more than 5% of our outstanding capital stock.

**Consulting Agreement with Mark Iwicki**

In June 2019, we entered into a consulting agreement with Mark Iwicki, the chairman of our board of directors, for consulting, advisory and related services to and for us as we may reasonably request from time to time, including advising on our corporate and research and development strategies. Pursuant to this agreement, Mr. Iwicki was granted a restricted stock award for 47,100 shares of our common stock, with 1/48th of the shares subject to the award vesting in equal monthly installments.

**Consulting Agreement with H. Martin Seidel, Ph.D.**

In July 2019, we entered into a consulting agreement with H. Martin Seidel, in connection with his appointment to our board of directors and scientific advisory board, for consulting services, including consulting with and advising us in his field of expertise on matters related to our business, products, research, development and technologies and provide such additional consulting and advisory services as we may reasonably request. We will make payments of $25,000 per year for such consulting services, payable quarterly in arrears. In addition, Dr. Seidel was granted a restricted stock award of 75,360 shares of our common stock, with 25% of the shares subject to the award vesting on July 25, 2020 and the remaining shares vesting in equal quarterly installments thereafter until July 25, 2023.

**Novartis Agreements**

We are party to a license agreement with Novartis International Pharmaceutical Ltd. See the section titled "Business—License Agreement—Novartis." Pursuant to this agreement, we entered into an investment letter whereby we have issued 5,970,000 shares of Series A-1 Preferred Stock to Novartis Institutes for Biomedical Research, Inc. As a result of such issuances, Novartis Institutes for Biomedical Research, Inc. is a holder of more than 5% of our outstanding common stock.

**Loans to Executive Officers**

In August 2021, we received a promissory note from Natalie Holles, our Chief Executive Officer, in connection with the purchase by Ms. Holles of shares of our common stock. The principal amount of the promissory note was $1,762,145, which accrues interest at 0.76%, compounding annually. As of December 31, 2021, the outstanding balance was approximately $1,767,428. The entire promissory note, including principal and accrued and unpaid interest, was forgiven prior to the filing of this registration statement with the SEC. See the section titled "Executive Compensation—Employment Agreements" for additional information.

**Use and Occupancy Agreements**

In 2021, we entered into use and occupancy agreements for a shared office space located at 300 Technology Square, Cambridge, Massachusetts from Atlas Venture Life Science Advisors, LLC, or Atlas, an entity where Mr. Gladstone and Mr. Rhodes, members of our board of directors, both serve as partner. Expenses under the agreements approximated $0.2 million for the fiscal year ended December 31, 2021.

**Investors' Rights Agreement**

We entered into the IRA with certain holders of our convertible preferred stock, including entities with which certain of our directors are affiliated and who hold more than 5% of our outstanding common stock. These stockholders are entitled to rights with respect to the registration of their shares under the Securities Act following this offering. See the section titled "Description of Capital Stock—Registration Rights" for additional information.

**Equity Grants to Executive Officers and Directors**

We have granted stock options to our executive officers and certain directors, as more fully described in the sections titled "Executive Compensation" and "Management—Non-Employee Director Compensation," respectively.

**Director and Executive Officer Compensation**

See the sections titled "Management—Non-Employee Director Compensation" and "Executive Compensation" for additional information.

**Employment-Related Agreements**

We have entered into employment offer letters with certain of our executive officers, and we intend to enter into amended and restated employment offer letters or agreements with our executive officers prior to the completion of this offering. See the section titled "Executive Compensation—Employment Agreements" for additional information.

**Indemnification Agreements**

In connection with this offering, we intend to enter into new indemnification agreements with each of our directors and executive officers. The indemnification agreements, our restated certificate of incorporation and our restated bylaws will require us to indemnify our directors to the fullest extent not prohibited by Delaware law. Subject to certain limitations, our restated bylaws also require us to advance expenses incurred by our directors and executive officers. See the section titled "Executive Compensation—Limitations on Liability and Indemnification Matters" for additional information.

**Policies and Procedures for Related Party Transactions**

In connection with this offering, we intend to adopt a written related person transactions policy that provides that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of our common stock, and any members of the immediate family of and any entity affiliated with any of the foregoing persons, are not permitted to enter into a material related person transaction with us without the review and approval of our audit committee, or a committee composed solely of independent directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. We expect the policy to provide that 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 our common stock or with any of their immediate

family members or affiliates in which the amount involved exceeds $120,000 will be presented to our audit committee (or the committee composed solely of independent directors, if applicable) for review, consideration and approval. In approving or rejecting any such proposal, we expect that our audit committee (or the committee composed solely of independent directors, if applicable) will consider the relevant facts and circumstances available and deemed relevant to the audit committee (or the committee composed solely of independent directors, if applicable), including, but not limited to, 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 and accompanying footnotes set forth certain information with respect to the beneficial ownership of shares of our common stock as of August 26, 2022, and as adjusted to reflect the shares of our common stock to be issued and sold in this offering, for:

- each of our directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person, or group of affiliated persons, known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, to our knowledge, the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of our common stock that they beneficially owned, subject to applicable community property laws.

Beneficial ownership prior to this offering is based on 27,793,935 shares of our common stock outstanding as of June 30, 2022, assuming the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our common stock immediately prior to the completion of this offering. Beneficial ownership after this offering is based on 36,793,935 shares of our common stock outstanding, assuming (i) the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our common stock outstanding as described above and (ii) 9,000,000 shares of our common stock issued by us in this offering, assuming that the underwriters do not exercise their option to purchase up to an additional 1,350,000 shares of our common stock from us in part or in full. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to stock options held by that person or entity that are currently exercisable or that will become exercisable within 60 days of August 26, 2022. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Third Harmonic Bio, Inc., 300 Technology Square, 8th Floor, Cambridge, Massachusetts 02139.

| Name of Beneficial Owner | Number of Shares Beneficially Owned | Percentage of Shares Beneficially Owned | |
|---|---|---|---|
| | | Before Offering | After Offering |
| **Directors and Named Executive Officers:** | | | |
| Natalie Holles(1) | 1,342,008 | 4.8 | 3.6 |
| Howard E. Davis, Jr., Ph.D.(2) | 163,467 | * | * |
| Stephen Yoo, M.D.(3) | 367,019 | 1.3 | 1.0 |
| Mark Iwicki(4) | 133,864 | * | * |
| David P. Bonita, M.D.(5) | — | * | * |
| Michael Gladstone(6) | — | * | * |
| Shao-Lee Lin, M.D., Ph.D.(7) | 38,393 | * | * |
| Rob Perez(8) | — | * | * |
| Jason Rhodes(6) | — | * | * |
| H. Martin Seidel, Ph.D.(9) | 87,122 | * | * |
| Thomas M. Soloway | — | * | * |
| All executive officers and directors as a group (11 persons)(10) | 1,601,387 | 5.8 | 4.4 |
| **Other 5% stockholders:** | | | |
| Entities affiliated with Atlas Venture Fund XI, L.P. (6) | 10,607,859 | 38.2 | 28.8 |
| Entities affiliated with BVF Partners L.P.(11) | 2,471,814 | 8.9 | 6.7 |
| General Atlantic (TH), L.P.(8) | 1,782,291 | 6.4 | 4.8 |
| Novartis Institutes for BioMedical Research, Inc.(12) | 2,642,762 | 9.5 | 7.2 |
| OrbiMed Private Investments VII, LP(5) | 5,479,071 | 19.7 | 14.9 |

* Represents beneficial ownership of less than one percent.
(1) Consists of (i) 1,218,837 shares of our common stock all of which are subject to forfeiture, and (ii) 123,171 shares of our common stock subject to options that are exercisable within 60 days of August 26, 2022.
(2) Consists of 163,467 shares of our common stock.
(3) Consists of (i) 353,736 shares of our common stock with 123,010 shares subject to forfeiture, and (ii) 13,284 shares of our common stock subject to options that are exercisable within 60 days of August 26, 2022.
(4) Consists of (i) 128,631 shares of our common stock with 42,476 shares subject to forfeiture, and (ii) 5,233 shares of our common stock subject to options that are exercisable within 60 days of August 26, 2022.
(5) Consists of 5,479,071 shares held by OrbiMed Private Investments VII, LP, or OPI VII. OrbiMed Capital GP VII LLC, or OrbiMed GP VII is the general partner of OPI VII. OrbiMed Advisors LLC, or OrbiMed Advisors is the managing member of OrbiMed GP VII. By virtue of such relationships, OrbiMed GP VII and OrbiMed Advisors may be deemed to have voting and investment power with respect to the shares held by OPI VII and as a result may be deemed to have beneficial ownership of such shares. David P. Bonita, a member of OrbiMed Advisors, is a member of our board of directors. OrbiMed Advisors exercises investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho and W. Carter Neild. Each of OrbiMed GP VII, OrbiMed Advisors, and David P. Bonita disclaims beneficial ownership of the shares held by OPI VII, except to the extent of its or his pecuniary interest therein if any.
(6) Consists of (i) 10,013,763 shares held by Atlas Venture Fund XI, L.P., or Atlas Fund XI, and (ii) 594,097 shares held by Atlas Venture Opportunity Fund I, L.P., or Atlas Fund I. Michael Gladstone and Jason Rhodes are members of our board of directors, and each is a Partner at Atlas Venture Life Science Advisors, LLC, or Atlas Venture, and disclaims beneficial ownership of the shares noted herein. Atlas Venture Associates XI, L.P. is the general partner of Atlas Fund XI, and Atlas Venture Associates XI, LLC is the general partner of Atlas Venture Associates XI, L.P. Each of Atlas Venture Associates XI, L.P. and Atlas Venture Associates XI, LLC may be deemed to beneficially own the shares held by Atlas Fund XI. Atlas Venture Associates Opportunity I, L.P. is the general partner of Atlas Fund I, and Atlas Venture Associates Opportunity I, LLC, or AVAO, LLC, is the general partner of Atlas Venture Associates Opportunity I, L.P. Each of Atlas Venture Associates Opportunity I, L.P. and AVAO, LLC may be deemed to beneficially own the shares held by Atlas Fund I. Bruce Booth, Jean-Francois Formela, David Grayzel, Jason Rhodes and Kevin Bitterman are the members of Atlas Venture Associates XI, LLC and AVAO, LLC and collectively make investment decisions on behalf of Atlas Fund XI and Atlas Fund I. The mailing address of Atlas Fund XI and Atlas Fund I is 300 Technology Square, 8th Floor, Cambridge, MA 02139.
(7) Consists of (i) 38,393 shares of our common stock subject to options that are exercisable within 60 days of August 26,2022.
(8) Consists of 1,782,291 shares of common stock. The limited partners that share beneficial ownership of the shares held by General Atlantic (TH), L.P., or GA TH, are the following General Atlantic investment funds, or the GA Funds: General Atlantic Partners 100, L.P., or GAP 100; General Atlantic Partners (Bermuda) EU, L.P., or GAP Bermuda EU; General Atlantic Partners (Lux) SCSp, or GAP Lux; GAP Coinvestments III, LLC, or GAPCO III; GAP Coinvestments IV, LLC, or GAPCO IV; GAP Coinvestments V, LLC, or GAPCO V; and GAP Coinvestments CDA, L.P., or GAPCO CDA. The general partner of GA TH is General Atlantic (SPV) GP, LLC, or GA SPV. The general partner of GAP Lux is General Atlantic GenPar, (Lux) SCSp, or GA GenPar Lux, and the general partner of GA GenPar Lux is General Atlantic (Lux) S.à r.l., or GA Lux. The general partner of GAP Bermuda EU and the sole shareholder of GA Lux is ultimately controlled by GAP (Bermuda) L.P., or GAP Bermuda LP. The ultimate general partner of GAP 100 is General Atlantic, L.P., or GA LP. GA LP is the managing member of GAPCO III, GAPCO IV, and GAPCO V, the general partner of GAPCO CDA, and the sole member of GA SPV. GA LP and GAP Bermuda LP are controlled by the Management Committee of GASC MGP, LLC (the “GA Management Committee”). There are nine members of the GA Management

Committee. GA LP, GAP Bermuda LP, GA Lux, GA GenPar Lux, GA TH, GA SPV, and the GA Funds are a "group" within the meaning of Rule 13d-5 of the Securities Exchange Act of 1934, as amended. Each of the members of the GA Management Committee disclaims ownership of the shares except to the extent that he has a pecuniary interest therein. In addition, Rob Perez, a member of our board of directors, is also an Operating Partner at General Atlantic and disclaims ownership of the shares except to the extent he has a pecuniary interest therein. The mailing address of each of the foregoing entities (other than GAP Bermuda EU, GAP Lux, GA Lux, and GAP Bermuda LP) is c/o General Atlantic Service Company, L.P., 55 East 52nd Street, 33rd Floor, New York, NY 10055. The mailing address of GAP Bermuda EU and GAP Bermuda LP is Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda. The mailing address of GAP Lux, GA GenPar Lux, and GA Lux is 412F, Route d'Esch, L-1471 Luxembourg.

(9) Consists of (i) 85,754 shares of our common stock with 34,113 shares subject to forfeiture, and (ii) 1,367 shares of our common stock subject to options that are exercisable within 60 days of August 26, 2022.

(10) Consists of (i) 1,433,222 shares of common stock with 1,418,436 shares subject to forfeiture and (ii) 168,165 shares of common stock subject to options that are exercisable within 60 days of August 26, 2022.

(11) Consists of (i) 1,317,426 shares held by Biotechnology Value Fund, L.P., or BVF, (ii) 999,206 shares held by Biotechnology Value Fund II, L.P., or BVF2, and (iii) 155,182 shares held by Biotechnology Value Trading OS LP, or Trading Fund OS. BVF I GP LLC, or BVF GP, as the general partner of BVF, may be deemed to beneficially own the shares beneficially owned by BVF. BVF II GP LLC, or BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the shares beneficially owned by BVF2. BVF Partners OS Ltd., or Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the shares beneficially owned by Trading Fund OS. BVF GP Holdings LLC, or BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the shares beneficially owned in the aggregate by BVF and BVF2. BVF Partners L.P., or Partners, as the sole member of Partners OS, and the investment manager of BVF, BVF2 and Trading Fund OS, may be deemed to beneficially own the shares beneficially owned in the aggregate by BVF, BVF2, and Trading Fund OS. BVF Inc., as the general partner of Partners, may be deemed to beneficially own the shares beneficially owned by Partners. Mark Lampert, as a director and officer of BVF Inc. may be deemed to beneficially own the shares beneficially owned by BVF Inc. The address for the BVF entities is located at 44 Montgomery Street, 40th Floor, San Francisco, CA 94104.

(12) Consists of 2,642,762 shares of common stock held of record by Novartis Institutes for BioMedical Research, Inc., or NIBRI. As the indirect parent of NIBRI, Novartis AG may be deemed to beneficially own these securities. The business address for NIBRI is 181 Massachusetts Avenue, Cambridge, Massachusetts 02139 and the business address for Novartis AG is Lichstrasse 35, Basel, Switzerland.

## DESCRIPTION OF CAPITAL STOCK

*The following description summarizes the most important terms of our capital stock, as will be in effect following this offering. Because it is only a summary, it does not contain all the information that may be important to you. We expect to adopt a restated certificate of incorporation and restated bylaws that will become effective upon the completion of this offering, and this description summarizes provisions that are expected to be included in these documents. For a complete description, you should refer to our restated certificate of incorporation and restated bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of Delaware law.*

### General

Upon the completion of this offering, our authorized capital stock will consist of 500,000,000 shares of our common stock, $0.0001 par value per share, and 10,000,000 shares of our undesignated preferred stock, $0.0001 par value per share.

Pursuant to the provisions of our current restated certificate of incorporation, all of our Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and Series B Preferred Stock will automatically convert into common stock in connection with the completion of this offering. Each share of our Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock, and our Series B Preferred Stock will convert into 0.4427 shares of our common stock. Assuming the effectiveness of this conversion as of June 30, 2022, there were 5,826,619 shares of our common stock issued (as a result of the 1-for-2.259 reverse stock split of our outstanding common stock), held by 11 stockholders of record, and 21,967,316 shares of our convertible preferred stock outstanding (as a result of the 1-for-2.259 reverse stock split of our outstanding common stock). Our board of directors is authorized, without stockholder approval, to issue additional shares of our capital stock.

### Common Stock

#### *Dividend Rights*

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 additional information.

#### *Voting Rights*

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors in our restated certificate of incorporation, which means that holders of a majority of the shares of our common stock will be able to elect all of our directors. Our restated certificate of incorporation will establish a classified board of directors, to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

#### *No Preemptive or Similar Rights*

Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

#### *Right to Receive Liquidation Distributions*

Upon our liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating

preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares our of preferred stock.

**Preferred Stock**

After the completion of this offering, no shares of our preferred stock will be outstanding. Pursuant to our restated certificate of incorporation that will become effective immediately prior to the completion of this offering, our board of directors will be authorized, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any of their qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Our board of directors will also be able to increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding and not above the number of shares of that series authorized, without any further vote or action by our stockholders. 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 our 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 control of our Company and might adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plan to issue any shares of preferred stock.

**Stock Options**

As of June 30, 2022, we had outstanding options to purchase an aggregate 1,803,079 shares of our common stock, with a weighted-average exercise price of $7.50 per share under our 2019 Plan.

**Registration Rights**

Pursuant to the terms of our amended and restated investors' rights agreement, or IRA, immediately following this offering, the holders of 25,508,705 shares of our common stock will be entitled to rights with respect to the registration of these shares under the Securities Act as described below. We refer to these shares collectively as registrable securities. These rights are provided under the terms of the IRA between us and the holders of these shares, which was entered into in connection with our convertible preferred stock financings prior to this offering.

***Demand Registration Rights***

Beginning from the earlier of five years after December 17, 2021 or 180 days after the completion of this offering, the holders of not less than a majority of the registrable securities issued or issuable upon conversion of shares of preferred stock may make a request to us for the registration under the Securities Act of at least 40% of the registrable securities then outstanding, or a lesser percent if the anticipated aggregate offering price, net of selling expenses, would exceed $10.0 million. Within 10 days after the date such request is given, we are obligated to provide notice of such request to all holders of registrable securities and, as soon as practicable and in any event within 60 days after the date such request is given, to 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. We are only required to file one registration statement that is declared effective upon exercise of these demand registration rights. We may postpone taking action with respect to such filing not more than once during any 12-month period for a total period of not more than 90 days, if after receiving a request for registration, we furnish to the holders requesting such registration a certificate signed by our Chief Executive Officer stating that, in the good faith judgment of our board of directors, it would be materially detrimental to us and our stockholders; provided that

we may not register any securities for our own account or that of any other stockholder during such 90-day period other than under certain circumstances.

The underwriters of any underwritten offering will have the right to limit the number of shares registered by these holders if they determine that marketing factors require limitation, in which case the number of shares to be registered will be apportioned, 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. However, the number of shares to be registered by these holders cannot be reduced unless all other securities are first entirely excluded from the underwriting.

***Form S-3 Registration Rights***

The holders of at least 20% of the then-outstanding registrable securities can request that we register all or part of their shares on Form S-3 if we are eligible to file a registration statement on Form S-3 and if the anticipated aggregate price to the public of the shares offered, net of selling expenses, is at least $5.0 million. Within ten days after such request is given, we are obligated to provide notice of such request to all holders of registrable securities and as soon as practicable and in any event within 45 days, file a Form S-3 registration statement, 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. We are only required to file one registration statement on Form S-3 in a 12-month period. We may postpone taking action with respect to such filing not more than once during any 12-month period for a period of not more than 90 days, if after receiving a request for registration, we furnish to the holders requesting such registration a certificate signed by our Chief Executive Officer stating that, in the good faith judgment of our board of directors, it would be materially detrimental to us and our stockholders; provided that we may not register any securities for our own account or that of any other stockholder during such 90-day period other than under certain circumstances.

The underwriters of any underwritten offering will have the right to limit the number of shares registered by these holders if they determine that marketing factors require limitation, in which case the number of shares to be registered will be apportioned, 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. However, the number of shares to be registered by these holders cannot be reduced unless all other securities are first entirely excluded from the underwriting.

***Piggyback Registration Rights***

If we register any of our securities for public sale in cash, holders of then-outstanding registrable securities or their permitted transferees will have the right to include their registrable securities in the registration statement. However, this right does not apply to a registration relating to the sale or grant of securities to our employees pursuant to a stock option, stock purchase, equity incentive or similar plan, a registration relating to a Rule 145 transaction, 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 our common stock, or a registration in which the only common stock being registered is common stock issuable upon conversion of debt securities that are also being registered. If the underwriters determine that less than all the registrable securities requested to be registered can be included in the offering, the number of registrable shares to be registered will be allocated among holders of our registrable securities, in proportion (as nearly as practicable) to the amount of registrable securities owned by each such holder or in such other proportions as shall mutually be agreed to by all such holders. However, the number of shares to be registered by holders of registrable securities cannot be reduced unless all other securities (other than as offered by us) are first entirely excluded. The number of registrable securities included in the offering may not be reduced below 20% of the total number of securities included in such offering, except for in connection with an initial public offering, in which case the underwriters may exclude these holders entirely.

***Expenses of Registration Rights***

We generally will pay all expenses, including expenses of one counsel for the selling holders, other than underwriting discounts and selling commissions incurred in connection with each of the registrations described above, including the reasonable fees and disbursements, provided, however, that the registrations described above are not subsequently withdrawn at the request of the holders of a majority in interest of the registrable securities (in which case all selling holders shall bear such expenses pro rata based upon the number of registrable securities that were to be included in the withdrawn registration) unless the holders of a majority of the registrable securities agree to forfeit their right to a registration as described above.

***Expiration of Registration Rights***

The registration rights described above will expire, with respect to any particular holder of these rights, on the earliest to occur of (i) the closing of a deemed liquidation event, as defined in our restated certificate of incorporation, (ii) such time after this offering as the registrable securities held by such holder may be sold within any three-month period without restriction pursuant to Rule 144 or a similar exemption under the Securities Act or (iii) the third anniversary of this offering.

***Anti-Takeover Provisions***

The provisions of the DGCL, our restated certificate of incorporation and our restated bylaws, as we expect they will be in effect upon the completion of this offering, could have the effect of delaying, deferring or discouraging another person from acquiring control of our Company. These provisions, which are summarized below, may have the effect of discouraging takeover bids. 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.

***Delaware Law***

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date on which the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (i) shares owned by persons who are directors and also executive officers and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66.67% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction or series of transactions together resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 of the DGCL may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

***Restated Certificate of Incorporation and Restated Bylaw Provisions***

Our restated certificate of incorporation and our restated bylaws, as we expect they will be in effect upon the completion of this offering, include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our Company, including the following:

- *Board of Directors Vacancies*. Our restated certificate of incorporation and restated bylaws will authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions would prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.

- *Classified Board*. Our restated certificate of incorporation and restated bylaws will provide that our board of directors is classified into three classes of directors, each with staggered three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors. See the section titled "Management—Board Composition" for additional information.

- *Stockholder Action; Special Meetings of Stockholders*. Our restated certificate of incorporation will provide that our stockholders may not take action by written consent but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our restated bylaws. Further, our restated bylaws will provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairperson of our board of directors, our Chief Executive Officer, the Lead Independent Director (as defined in the restated bylaws) or our President, thus prohibiting a stockholder from calling a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

- *Advance Notice Requirements for Stockholder Proposals and Director Nominations*. Our restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also will specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our Company.

- *No Cumulative Voting*. The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless a corporation's restated certificate of incorporation provides otherwise. Our restated certificate of incorporation and restated bylaws will not provide for cumulative voting.

- *Directors Removed Only for Cause*. Our restated certificate of incorporation will provide that stockholders may remove directors only for cause and only by the affirmative vote of the holders of at least two-thirds of our outstanding common stock.

- *Amendment of Charter Provisions*. Any amendment of the above expected provisions in our restated certificate of incorporation will require approval by the holders of at least two-thirds of our outstanding common stock.

- *Issuance of Undesignated Preferred Stock*. Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by merger, tender offer, proxy contest or other means.

- *Choice of Forum*. Our restated certificate of incorporation will provide that, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware will be 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 arising pursuant to the DGCL, our restated certificate of incorporation or our restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Our restated bylaws will provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, which we refer to as a Federal Forum Provision. Our decision to adopt a Federal Forum Provision followed a decision by the Supreme Court of the State of Delaware holding that such provisions are facially valid under Delaware law. While there can be no assurance that federal courts or other state courts will follow the holding of the Delaware Supreme Court or determine that the Federal Forum Provision should be enforced in a particular case, application of the Federal Forum Provision means that suits brought by our stockholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court. While neither the exclusive forum provision nor the Federal Forum Provision applies to suits brought to enforce any duty or liability created by the Exchange Act, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all claims brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Accordingly, actions by our stockholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder also must be brought in federal court. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to our exclusive forum provisions, including the Federal Forum Provision. These provisions may limit a stockholder's ability to bring a claim in a judicial forum of their choosing for disputes with us or our directors, executive officers, other employees or agents of our Company, which may discourage lawsuits against us and our directors, executive officers and other employees.

**Transfer Agent and Registrar**

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

**The Nasdaq Global Market Listing**

We have applied to list our common stock on Nasdaq under the symbol "THRD." The closing of this offering is contingent upon such listing.

## SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and we cannot predict the effect, if any, that market sales of shares of our common stock or the availability of shares of our common stock for sale will have on the market price of our common stock prevailing from time to time. Nevertheless, sales of our common stock, including shares issued upon exercise of outstanding options, in the public market following this offering could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through the sale of our equity securities.

Upon the completion of this offering, we will have a total of 38,143,935 shares of our common stock outstanding, assuming (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 21,967,316 shares of our common stock and (ii) the issuance of 10,350,000 shares of common stock in this offering (if the underwriters exercise their over-allotment option in full). Of these outstanding shares, all of the shares of our common stock sold in this offering will be freely tradable, except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act can only be sold in compliance with the Rule 144 limitations described below.

The remaining outstanding shares of our common stock will be, and shares subject to stock options will be upon issuance, deemed "restricted securities" as defined in Rule 144. Restricted securities may be sold in the public market only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 promulgated under the Securities Act, which rules are summarized below. In addition, substantially all of our security holders have, or will have, entered into market standoff agreements with us or lock-up agreements with the underwriters under which they have agreed, subject to specific exceptions, not to sell any of our stock for at least 180 days following the date of this prospectus, as described below.

### Lock-Up and Market Standoff Agreements

All of our directors and officers and substantially all of our security holders are, or will be, subject to lock-up agreements or market standoff provisions that prohibit them from offering for sale, selling, contracting to sell, granting any option for the sale of, transferring or otherwise disposing of any shares of our common stock or options to acquire shares of our common stock or any security or instrument related to our common stock, or entering into any swap, hedge or other arrangement that transfers any of the economic consequences of ownership of our common stock, for a period of 180 days following the date of this prospectus without the prior written consent of Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC, subject to certain exceptions. See the section titled "Underwriters" for additional information.

### Rule 144

In general, Rule 144 provides that 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, a person who is not 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 who has beneficially owned the shares of our common stock proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those 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. 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 that person would be entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, Rule 144 provides that our affiliates or persons selling shares of our common stock on behalf of our affiliates are entitled to sell upon expiration of the lock-up and market standoff agreements described above, within any three-month period, a number of shares of our common stock that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 367,939 shares immediately after the completion of this offering; or
- the average reported weekly trading volume of share of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates or persons selling shares of our common stock on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

**Rule 701**

Rule 701 generally allows a stockholder who purchased shares of our common stock pursuant to 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 upon 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 our affiliates 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 to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701 and are subject to the lock-up and market standoff agreements described above.

**Form S-8 Registration Statement**

In connection with this offering, we intend to file a registration statement on Form S-8 under the Securities Act covering all of the shares of our common stock subject to outstanding options, outstanding shares of restricted stock and the shares of our common stock reserved for issuance under our stock plans. We expect to file this registration statement as soon as permitted under the Securities Act. However, the shares registered on Form S-8 may be subject to the volume limitations and the manner of sale, notice and public information requirements of Rule 144 and will not be eligible for resale until expiration of the lock-up and market standoff agreements to which they are subject. Of the 1,803,079 shares of our common stock that were subject to options outstanding as of June 30, 2022, options to purchase 173,061 shares of common stock were vested as of June 30, 2022. Shares of our common stock underlying outstanding options will not be eligible for sale until the expiration of the 180-day lock-up and market standoff agreements to which they are subject.

**Registration Rights**

We have granted demand, piggyback and Form S-3 registration rights to certain of our stockholders to sell our common stock. Registration of the sale of these shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See the section titled “Description of Capital Stock—Registration Rights” for additional information.

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

The following summary describes the material U.S. federal income tax consequences of the acquisition, ownership and disposition of shares of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion does not address all aspects of U.S. federal income taxes, does not discuss the potential application of the alternative minimum tax or Medicare Contribution tax on net investment income and does not deal with state or local tax laws, U.S. federal gift and estate tax laws, except to the limited extent provided below, or any non-U.S. tax laws that may be relevant to Non-U.S. Holders in light of their particular circumstances.

Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Code, such as:

- insurance companies, banks, investment funds and other financial institutions;
- tax-exempt organizations (including private foundations) and tax-qualified retirement plans;
- foreign governments and international organizations;
- broker-dealers and traders in securities;
- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons required for U.S. federal income tax purposes to conform the timing of income accruals to their financial statements under Section 451(b) of the Code;
- "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons that own, or are deemed to own, more than 5% of our capital stock;
- "controlled foreign corporations," "passive foreign investment companies" and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons that hold our common stock as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or integrated investment or other risk reduction strategy;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes); and
- partnerships and other entities or arrangements treated as pass-through or disregarded entities for U.S. federal income tax purposes, and investors in such entities (regardless of their places of organization or formation).

Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them.

Furthermore, the discussion below is based upon the provisions of the Code, and U.S. Treasury Regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, possibly retroactively, or could be subject to differing interpretations which could result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the Internal Revenue Service, or 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 will not take a contrary position regarding the tax consequences described herein, or that any such contrary position would not be sustained by a court.

PERSONS CONSIDERING THE PURCHASE OF OUR COMMON STOCK PURSUANT TO THIS OFFERING SHOULD CONSULT THEIR OWN TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK IN LIGHT OF THEIR PARTICULAR SITUATIONS AS WELL AS ANY CONSEQUENCES ARISING UNDER THE LAWS OF ANY OTHER TAXING JURISDICTION, INCLUDING ANY STATE, LOCAL OR NON-U.S. TAX CONSEQUENCES OR ANY U.S. FEDERAL NON-INCOME TAX CONSEQUENCES, AND THE POSSIBLE APPLICATION OF TAX TREATIES.

For the purposes of this discussion, a "Non-U.S. Holder" is a beneficial owner of common stock, other than a partnership or other entity or arrangement treated as a pass-through entity that is not, for U.S. federal income tax purposes, (a) an individual who is a citizen or resident of the United States, (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes), created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate, the income of which is subject to U.S. federal income taxation regardless of its source, or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If you are an individual Non-U.S. citizen, you may, in some cases, be deemed to be a resident alien (as opposed to a nonresident alien) by virtue of being present in the United States for at least 31 days in the calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. Generally, for this purpose, all the days present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year, are counted.

Resident aliens are generally subject to U.S. federal income tax as if they were U.S. citizens. Individuals who are uncertain of their status as resident or nonresident aliens for U.S. federal income tax purposes are urged to consult their own tax advisors regarding the U.S. federal income tax consequences of the ownership or disposition of our common stock.

**Distributions**

We do not expect to make any distributions on our common stock in the foreseeable future. If we do make distributions on our common stock, however, such distributions will constitute dividends for U.S. tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a Non-U.S. Holder's adjusted tax basis in our common stock. Any remaining excess will be treated as gain realized on the sale or exchange of our common stock as described below under the section titled "Material U.S. Federal Income Tax Consequences to Non-U.S. Holders–Gain on Disposition of Our Common Stock."

Any distribution on our common stock that is treated as a dividend paid to a Non-U.S. Holder that is not effectively connected with the non-U.S. Holder's conduct of a trade or business in the United States will generally be subject to U.S. federal withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide the applicable withholding agent with a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. Such form must be provided prior to the payment of dividends and generally must be updated periodically. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent may then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. withholding tax under an income tax treaty, you should consult with your own

tax advisor to determine if you are able to obtain a refund of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that the holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to the applicable withholding agent. In general, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the same rates applicable to U.S. persons. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments.

See the section titled "Material U.S. Federal Income Tax Consequences to Non-U.S. Holders—Foreign Accounts" for additional information on withholding rules that may apply to dividends paid to certain foreign financial institutions or non-financial entities.

**Gain on Disposition of Our Common Stock**

Subject to the discussions below under the sections titled "Material U.S. Federal Income Tax Consequences to Non-U.S. Holders—Backup Withholding and Information Reporting" and "—Foreign Accounts," a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of the Non-U.S. Holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that the holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien who is an individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or the Non-U.S. Holder's holding period in the common stock.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at the same U.S. federal income tax rates applicable to U.S. persons. Corporate Non-U.S. Holders described in (a) above may also be subject to the additional branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty) of their effectively connected earnings and profits for the taxable year, as adjusted for certain items. If you are an individual Non-U.S. Holder described in (b) above, you will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by certain U.S. source capital losses (even though you are not considered a resident of the United States), provided you have timely filed U.S. federal income tax returns with respect to such losses. With respect to (c) above, in general, we would be a United States real property holding corporation if U.S. real property interests as defined in the Code and the U.S. Treasury Regulations comprised (by fair market value) at least half of the sum of our worldwide real property interests plus our other assets used or held for use in a trade or business. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation. However, there can be no assurance that we will not become a United States real property holding corporation in the future. Even if we were to be treated as a U.S. real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock would not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly or constructively, no more than five percent of our common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the Non-U.S. Holder's holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will qualify as regularly traded on an established securities market.

**U.S. Federal Estate Tax**

The estates of nonresident alien individuals generally are subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and, therefore, will be included in the taxable estate of a nonresident alien decedent, unless an applicable estate tax treaty between the United States and the decedent's country of residence provides otherwise. The terms "resident" and "nonresident" are defined differently for U.S. federal estate tax purposes than for U.S. federal income tax purposes. Investors are urged to consult their own tax advisors regarding the U.S. federal estate tax consequences of the ownership or disposition of our common stock.

**Backup Withholding and Information Reporting**

Generally, we or certain financial middlemen must report information to the IRS with respect to any dividends we pay on our common stock including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. federal backup withholding. U.S. federal backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E, or IRS Form W-8 ECI, as applicable, or otherwise establishes an exemption, *provided that* the applicable withholding agent does not have actual knowledge or reason to know the holder is a U.S. person.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. broker or a U.S. office of any broker, U.S. or non-U.S., unless the Non-U.S. Holder provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E, or IRS Form W-8 ECI, as applicable, or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. If backup withholding is applied to you, you should consult with your own tax advisor to determine whether you have overpaid your U.S. federal income tax, and whether you are able to obtain a tax refund or credit of the overpaid amount.

**Foreign Accounts**

In addition, U.S. federal withholding taxes may apply under the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments, including dividends paid to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution agrees to undertake certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. The 30% federal withholding tax described in this paragraph cannot be reduced under an income tax treaty with the United States. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring,

among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally also would apply to payments of gross proceeds from the sale or other disposition of common stock. Under proposed regulations, however, no withholding will apply with respect to payments of gross proceeds. The preamble to the proposed regulations specifies that taxpayers are permitted to rely on such proposed regulations pending finalization.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS SUCH AS ESTATE AND GIFT TAX OR UNDER ANY APPLICABLE TAX TREATY.

## UNDERWRITERS

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

| Name | Number of Shares |
|---|---|
| Morgan Stanley & Co. LLC | |
| Jefferies LLC | |
| Cowen and Company, LLC | |
| LifeSci Capital LLC | |
| Total: | 9,000,000 |

The underwriters and the representatives are collectively referred to as the "underwriters" and the "representatives," respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below. The offering of the shares of common stock by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of $ per share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 1,350,000 additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional 1,350,000 shares of our common stock.

| | Per Share | Total | |
|---|---|---|---|
| | | No Exercise | Full Exercise |
| Public offering price | $ | $ | $ |
| Underwriting discounts and commissions to be paid by us | $ | $ | $ |
| Proceeds, before expenses, to us | $ | $ | $ |

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately $3.3 million. We have also agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to $35,000.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

In addition, we have requested that the underwriters make issuer directed allocations in the aggregate of shares of our common stock to certain investors.

We have applied to list our common stock on Nasdaq under the trading symbol “THRD”. The closing of this offering is contingent upon such listing.

We and all of our directors and officers and the holders of substantially all of our outstanding securities have agreed that, without the prior written consent of Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC on behalf of the underwriters, we and they will not, and will not publicly disclose an intention to, during the period ending 180 days after the date of this prospectus (the “restricted period”):

(1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock;

(2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock; or

(3) confidentially submit any draft registration statement or file any registration statement with the SEC relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock;

whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person have agreed that, without the prior written consent of Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC on behalf of the underwriters, we or such other person will not, and will not publicly disclose intention to, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph do not apply to our directors, officers and securityholders with respect to:

(1) transactions relating to shares of common stock or other securities acquired in this offering or in open market transactions after the completion of the this offering, provided that no filing under Section 16(a) of the Exchange Act or other public announcement shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in this offering or in such open market transactions during the restricted period, and to the extent a filing under Section 16(a) of the Exchange Act (or on Schedule 13D (or 13D/A), Schedule 13G (or 13G/A) or Form 13F) is required during the restricted period as a result of transaction described in this paragraph (1), it shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this paragraph (1);

(2) transfers or distributions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock (i) as a bona fide gift or charitable contribution, (ii) by will or intestacy or to any member of the holder’s immediate family or to a trust for the direct or indirect benefit of the holder and/or any member of the holder’s immediate family, (iii) to any corporation,

partnership, limited liability company or other business entity, all of the beneficial ownership interests of which, in each such case, are held by the holder or any member of the holder's immediate family, (iv) if the holder is an entity, to general or limited partners, beneficiaries, direct or indirect members, stockholders or holders of similar equity interests in the holder, or (v) if the holder is an entity, to another corporation, partnership, limited liability company, trust or other business entity including any subsidiaries of the undersigned, that is a direct or indirect affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the holder, or to any investment fund or other entity that controls or manages, is controlled or managed by or is under common control or common management with the holder or affiliated with, or an investment manager of, the holder; provided that, in the case of any transfer or distribution pursuant to this clause (2), (A) each transferee, donee or distributee shall sign and deliver a lock-up agreement, (B) such transfer or distribution does not involve a disposition for value, and (C) no filing under Section 16(a) of the Exchange Act or other public announcement reporting a reduction in beneficial ownership of shares of common stock or any securities convertible into or exercisable or exchangeable for common stock shall be required or shall be voluntarily made during the restricted period (other than, in the case of a transfer or other disposition pursuant to clause (i) or (ii) above, a Form 5 required to be filed under the Exchange Act if the holder is subject to Section 16 reporting with respect to us under the Exchange Act, any such filing will indicate by footnote disclosure or otherwise the nature of the transfer or disposition);

(3) transfers of shares of common stock or any security convertible into or exercisable or exchangeable for shares of common stock by operation of law pursuant to a qualified domestic order or other court order or in connection with a divorce settlement; provided that (i) any filing under Section 16(a) of the Exchange Act made during the restricted period shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described in this clause (3) and (B) no securities were sold by the holder, (ii) the holder does not otherwise voluntarily effect any other public filing or report regarding such transfers during the restricted period, and (iii) each transferee shall sign and deliver a lock-up agreement;

(4) the exercise of options or other similar awards or the vesting or settlement of awards granted pursuant to our equity incentive plans as described in this prospectus and outstanding on the date of the underwriting agreement (including the delivery and receipt of shares of common stock, other awards or any securities convertible into or exercisable or exchangeable for shares of common stock in connection with such exercise, vesting or settlement), or (ii) the transfer or disposition of shares of common stock or any securities convertible into shares of common stock by the holder to us (or the purchase and cancellation of the same by us) upon a vesting or settlement event of our securities or upon the exercise of options to purchase our securities expiring during the restricted period, on a "cashless" or "net exercise" basis solely to the extent permitted by the instruments representing such options, in each case pursuant to our equity incentive plans as described in this prospectus and solely to cover withholding tax obligations in connection with such transaction and any transfer to us for the payment of taxes as a result of such transaction, provided that (A) the shares of common stock received upon the exercise, vesting, or settlement of the options or other awards described in this clause (4) are subject to the terms of the lock-up agreement, (B) no public disclosure or filing under Section 16(a) of the Exchange Act shall be voluntarily made during the restricted period, (C) to the extent a filing under Section 16(a) of the Exchange Act is required during the restricted period as a result of transfers described in clause (4)(i), it shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in clause (4)(i) and that the shares of common stock received upon the exercise, vesting, or settlement of such options or other awards are subject the lock-up agreement, and (D) with respect to any transfers or dispositions described in clause (4)(ii) above, no public disclosure or filing shall be made during the restricted period within 60 days after the date of this prospectus (unless such equity award would otherwise expire during such period), and after such 60th day, if the holder is required to file a report reporting a reduction in beneficial ownership of shares of common stock during the restricted period, the holder shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in clause (4)(ii) and that the shares of common stock received upon such exercise or settlement are subject to the lock-up agreement;

(5) transfers to us pursuant to the repurchase of shares of common stock in connection with the termination of the holder's employment with us or other service relationship with us pursuant to contractual agreements with us as in effect as of the date of this prospectus and disclosed in this prospectus, provided that, if the holder is required to file a report reporting a reduction in beneficial ownership of shares of common stock during the restricted period, the holder shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (5) and no public disclosure or filing shall be voluntarily made;

(6) transfers of shares of common stock or any security convertible into or exercisable or exchangeable for shares of common stock that are required to effect the recapitalization of us as described in this prospectus and completed prior to the completion of this offering, including the conversion of our outstanding preferred shares, provided that (A) any shares of common stock received upon the exercise or exchange of any such convertible securities remain subject to the terms of the lock-up agreement and (B) no filing under Section 16(a) of the Exchange Act or other public filing, report or announcement shall be voluntarily made and, if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of common stock in connection with such transfer or distribution shall be legally required during the restricted period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer;

(7) facilitating the establishment of a trading plan on behalf of a stockholder, officer, or director of ours pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the holder or us regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period; or

(8) transfers pursuant to a bona fide third-party tender offer, merger, amalgamation, consolidation or other similar transaction approved by our board of directors and made to all holders of our securities involving a "change of control" of us (including, without limitation, the entering into any lock-up, voting or similar agreement pursuant to which the holder may agree to transfer, sell, tender or otherwise dispose of shares of common stock or other such securities in connection with such transaction, or vote any shares of common stock or other such securities in favor of any such transaction); provided that in the event that such tender offer, merger, amalgamation, consolidation or other such transaction is not completed, such securities held by the holder shall remain subject to the provisions of the lock-up agreement.

The restrictions on transfers or other dispositions by us described above do not apply to (1) the shares to be sold in this offering, (2) the issuance by us of shares of common stock upon the exercise of an option or warrant or the conversion of a security outstanding on the date of this prospectus as described in the registration statement and this prospectus, (3) facilitating the establishment of a trading plan on behalf of a stockholder, officer or director of ours pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by us regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period, (4) grants of options, restricted stock or other equity awards and the issuance of common stock or securities convertible into or exercisable for common stock to our employees, officers, directors, advisors, or consultants pursuant to the terms of a plan in effect on the date of this prospectus and described in the registration statement and this prospectus, provided that we shall cause each recipient of such grants of options, restricted stock or other equity awards to execute and deliver to the representatives a lock-up agreement if such recipient has not already delivered one,

(5) the filing of a registration statement on Form S-8 to register common stock issuable pursuant to any employee benefit plans, qualified stock option plans or other employee compensation plans described in the registration statement and this prospectus and provided that the recipients of such securities provide to the representatives a signed lock-up agreement, and (6) the issuance by us of shares of common stock or any securities convertible into or exercisable or exchangeable for, common stock, or the entrance into an agreement to issue common stock or any securities convertible into, or exercisable or exchangeable for, common stock, in connection with any merger, joint venture, strategic alliances, commercial or other collaborative transaction or the acquisition or license of the business, property, technology or other assets of another individual or entity or the assumption of an employee benefit plan in connection with a merger or acquisition; provided that the aggregate number of shares of common stock or any securities convertible into, or exercisable or exchangeable for, common stock that we may issue or agree to issue pursuant to this clause (6) shall not exceed 5% of our total outstanding share capital immediately following the issuance of the shares; and provided, further, that the recipients of such securities provide the representatives with a signed lock-up agreement.

Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC, in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

**Other Relationships**

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

**Pricing of the Offering**

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives. Among the factors to be considered in determining the initial public offering price will be our future prospects and those of our industry in general, our sales, earnings and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

**Selling Restrictions**

***Canada***

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

***European Economic Area***

In relation to each Member State of the European Economic Area (each, a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of securities may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

(i) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

(ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives; or

(iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129 (as amended).

***United Kingdom***

Each underwriter has represented and agreed that:

(i) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or the FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(i) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(iii) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

This prospectus is only for distribution to and directed at: (i) in the United Kingdom, persons having 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 high net worth entities falling within Article 49(2)(a) to (d) of the Order; (ii) persons who are outside the United Kingdom; and (iii) any other person to whom it can otherwise be lawfully distributed, or all such persons together, Relevant Persons. Any investment or investment activity to which this prospectus relates is available only to and will be engaged in only with Relevant Persons, and any person who is not a Relevant Person should not rely on it.

***Hong Kong***

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

***Japan***

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

***Singapore***

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the securities were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(i) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(ii) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor;

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law; or

(d) as specified in Section 276(7) of the SFA.

***Switzerland***

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to us, the offering, or the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offering of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, or the FINMA, and the offering of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or the CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of the shares.

***Dubai International Financial Centre***

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or the DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

***Australia***

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or the Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons, or Exempt Investors, who are “sophisticated investors” (within the meaning of section 708(8) of the Corporations Act), “professional investors” (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under

section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring the shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

***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, or the Addressed Investors; or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728 - 1968, subject to certain conditions, or the Qualified Investors. The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The 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.

## LEGAL MATTERS

The validity of the shares of our common stock offered by this prospectus will be passed upon for us by Fenwick & West LLP, San Francisco, California. Cooley LLP, San Diego, California, is acting as counsel for the underwriters in connection with this offering.

## EXPERTS

The consolidated financial statements of Third Harmonic Bio, Inc. as of December 31, 2020 and 2021, and for each of the two years in the period ended December 31, 2021, included in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are included in reliance upon the report of such firm given their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 (File Number 333-267022) under the Securities Act with respect to the shares of our common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits filed therewith. For further information about us and the common stock offered hereby, reference is made to the registration statement and the exhibits filed therewith. Statements contained in this prospectus concerning the contents of any contract or any document are not necessarily complete. 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 exhibits to the registration statement should be reviewed for the complete contents of these contracts and documents.

We currently do not file periodic reports with the SEC. Upon the completion of this offering, we will be required to file periodic reports, proxy statements and other information with the SEC pursuant to the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov.

We also maintain a website at www.thirdharmonicbio.com. Upon completion of this offering, you may access these materials at our website free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus. We have included our website in this prospectus solely as a textual reference.

**Third Harmonic Bio, Inc.**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

**Audited Consolidated Financial Statements for the Years Ended December 31, 2020 and 2021:**



**Unaudited Interim Condensed Consolidated Financial Statements for the Six Months Ended June 30, 2021 and 2022:**

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Third Harmonic Bio, Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Third Harmonic Bio, Inc. and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, changes in redeemable convertible preferred stock and stockholders' deficit, and cash flows, for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, 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 in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Parsippany, New Jersey
May 13, 2022 (September 8, 2022, as to the effects of the 1-for-2.259 stock split described in Note 14)

We have served as the Company's auditor since 2022.

**THIRD HARMONIC BIO, INC.**
**CONSOLIDATED BALANCE SHEETS**
**(In thousands, except share and per share amounts)**

| | December 31, 2020 | December 31, 2021 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 8,277 | $128,280 |
| Prepaid expenses and other current assets | 156 | 884 |
| Total current assets | 8,433 | 129,164 |
| Total assets | $ 8,433 | $129,164 |
| **Liabilities, redeemable convertible preferred stock and stockholders' deficit** | | |
| Current liabilities: | | |
| Accounts payable | $ 581 | $ 1,797 |
| Accrued expenses and other current liabilities | 1,633 | 3,889 |
| Total current liabilities | 2,214 | 5,686 |
| Preferred stock tranche liability | 4,994 | — |
| Anti-dilution liability | 883 | — |
| Total liabilities | 8,091 | 5,686 |
| Commitments and contingencies (Note 11) | | |
| Series A-1 redeemable convertible preferred stock, par value $0.0001. 13,970,000 shares authorized as of December 31, 2020 and 2021; 12,746,691 and 13,970,000 shares issued and outstanding as of December 31, 2020 and 2021, respectively; liquidation preference of $12,747 and $13,970 as of December 31, 2020 and 2021, respectively | 11,008 | 12,574 |
| Series A-2 redeemable convertible preferred stock, par value $0.0001. 20,000,000 and 13,750,000 shares authorized as of December 31, 2020 and 2021, respectively; 6,875,000 and 13,750,000 shares issued and outstanding as of December 31, 2020 and 2021, respectively; liquidation preference of $11,000 and $22,000 as of December 31, 2020 and 2021, respectively | 7,691 | 19,476 |
| Series A-3 redeemable convertible preferred stock, par value $0.0001. — and 7,812,501 shares authorized as of December 31, 2020 and 2021, respectively; — and 7,812,501 shares issued and outstanding as of December 31, 2020 and 2021, respectively; liquidation preference of — and $20,000 as of December 31, 2020 and 2021, respectively | — | 33,288 |
| Series B redeemable convertible preferred stock, par value $0.0001. — and 14,091,689 shares authorized as of December 31, 2020 and 2021, respectively; —and 14,091,686 shares issued and outstanding as of December 31, 2020 and 2021, respectively; liquidation preference of — and $105,000 as of December 31, 2020 and 2021, respectively | — | 104,846 |
| Stockholders' deficit: | | |
| Common stock, par value $0.0001. 50,000,000 and 72,731,000 shares authorized as of December 31, 2020 and 2021, respectively; 3,866,138 and 4,237,290 shares issued and outstanding as of December 31, 2020 and 2021, respectively. | 1 | 1 |
| Additional paid-in capital | 274 | 1,534 |
| Accumulated deficit | (18,632) | (48,241) |
| Total stockholders' deficit | (18,357) | (46,706) |
| Total liabilities, redeemable convertible preferred stock and stockholders' deficit | $ 8,433 | $129,164 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CONSOLIDATED STATEMENTS OF OPERATIONS**
**(In thousands, except share and per share amounts)**

| | December 31, 2020 | December 31, 2021 |
|---|---|---|
| Operating expenses: | | |
| Research and development | $ 9,953 | $ 15,748 |
| General and administrative | 1,166 | 3,256 |
| Total operating expenses | 11,119 | 19,004 |
| Loss from operations | 11,119 | 19,004 |
| Other (income) expense, net: | | |
| Change in fair value of anti-dilution right liability | 607 | 682 |
| Change in fair value of preferred stock tranche liability | 1,081 | 9,928 |
| Other income | — | (5) |
| Total other income (expense), net | 1,688 | 10,605 |
| Net loss | $ 12,807 | $ 29,609 |
| Net loss per share of common stock, basic and diluted | $ 3.49 | $ 7.32 |
| Weighted-average common stock outstanding, basic and diluted | 3,668,072 | 4,043,416 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT**
**(In thousands, except share amounts)**

| | Redeemable Convertible Preferred Stock | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Series A-1 | | Series A-2 | | Series A-3 | | Series B | | Common Stock | | Additional Paid-In Capital | Accumulated Deficit | Total Stockholders' Deficit |
| | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | | | |
| **Balance at January 1, 2020** | 11,449,808 | $ 9,996 | — | $ — | — | $ — | — | $ — | 3,591,540 | $ 1 | $ 79 | $ (5,825) | $ (5,745) |
| Issuance of Series A-1 redeemable convertible preferred stock under anti-dilution liability | 1,297,153 | 1,012 | — | — | — | — | — | — | — | — | — | — | — |
| Issuance of Series A-2 redeemable convertible preferred stock, net of issuance costs of $174 | — | — | 6,875,000 | 7,691 | — | — | — | — | — | — | — | — | — |
| Vesting of restricted stock | — | — | — | — | — | — | — | — | 274,598 | — | — | — | — |
| Stock-based compensation expense | — | — | — | — | — | — | — | — | — | — | 195 | | 195 |
| Net loss | — | — | — | — | — | — | — | — | — | — | | (12,807) | (12,807) |
| **Balance at December 31, 2020** | 12,746,961 | $11,008 | 6,875,000 | $ 7,691 | — | $ — | — | $ — | 3,866,138 | $ 1 | $ 274 | $ (18,632) | $ (18,357) |
| Issuance of Series A-2 redeemable convertible preferred stock under Series A-2 Second Tranche, net of issuance costs of $40 | — | — | 6,875,000 | 11,785 | — | — | — | — | — | — | — | — | — |
| Gain on extinguishment of Series A-2 redeemable convertible preferred stock tranche liability | — | — | — | — | — | — | — | — | — | — | 750 | — | 750 |
| Issuance of Series A-1 redeemable convertible preferred stock under anti-dilution liability | 1,223,039 | 1,566 | — | — | — | — | — | — | — | — | — | — | — |
| Issuance of Series A-3 redeemable convertible preferred stock, net of issuance costs of $58 | — | — | — | — | 7,812,501 | 33,288 | — | — | — | — | — | — | — |
| Issuance of Series B redeemable convertible preferred stock, net of issuance costs of $154 | — | — | — | — | — | — | 14,091,686 | 104,846 | — | — | — | — | — |
| Vesting of restricted stock | — | — | — | — | — | — | — | — | 371,152 | — | — | — | — |
| Stock-based compensation expense | — | — | — | — | — | — | — | — | | | 510 | | 510 |
| Net loss | — | — | — | — | — | — | — | — | | | | (29,609) | (29,609) |
| **Balance at December 31, 2021** | 13,970,000 | $12,574 | 13,750,000 | $19,476 | 7,812,501 | $33,288 | 14,091,686 | $104,846 | 4,237,290 | $ 1 | $ 1,534 | $ (48,241) | $ (46,706) |

*The accompanying notes are an integral part of these consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In thousands, except share and per share amounts)**

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| **Cash flows from operating activities:** | | |
| Net loss | $(12,807) | $ (29,609) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Stock-based compensation expense | 195 | 510 |
| Change in fair value of preferred stock tranche liability | 1,081 | 9,928 |
| Change in fair value of anti-dilution liability | 607 | 682 |
| Changes in operating assets and liabilities: | | |
| Prepaid expenses and other current assets | (157) | (728) |
| Accounts payable | 324 | 1,216 |
| Accrued expenses and other current liabilities | 1,570 | 2,255 |
| Net cash used in operating activities | (9,187) | (15,746) |
| **Cash flows from investing activities:** | | |
| Net cash used in investing activities | — | — |
| **Cash flows from financing activities:** | | |
| Proceeds from issuance of preferred stock, net of issuance costs | 10,825 | 135,749 |
| Net cash provided by financing activities | 10,825 | 135,749 |
| Net increase in cash and cash equivalents | 1,638 | 120,003 |
| Cash and cash equivalents at beginning of period | 6,639 | 8,277 |
| Cash and cash equivalents at end of period | $ 8,277 | $128,280 |
| **Supplemental disclosure of non-cash financing activity:** | | |
| Preferred stock tranche liability established in connection with the issuance of redeemable convertible preferred stock | $ 3,135 | $ 2,979 |
| Issuance of redeemable convertible preferred stock in settlement of preferred stock tranche liability | $ — | $ 17,149 |
| Gain on extinguishment of preferred stock tranche liability recorded to additional paid in capital | $ — | $ 750 |
| Issuance of redeemable convertible preferred stock in settlement of anti-dilution right liability | $ 1,012 | $ 1,566 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

## 1. Nature of the Business

Third Harmonic Bio, Inc., ("Third Harmonic" or the "Company") is a clinical-stage biopharmaceutical company focused on development of the next wave of medicine for the treatment of allergic and inflammatory diseases.

The Company was incorporated in 2019 as a Delaware corporation, and has principal offices in Cambridge, Massachusetts. In December 2021, the Company formed THB MS, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, which is classified as a Security Corporation in Massachusetts.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, completion and success of clinical testing, development by competitors of new technological innovations, compliance with governmental regulations, dependence on key personnel and protection of proprietary technology and the ability to secure additional capital to fund operations. THB001 will require extensive clinical testing prior to regulatory approval and commercialization. These efforts require significant amounts of additional capital, adequate personnel, and infrastructure and extensive compliance-reporting capabilities. Even if the Company's drug development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

### *Liquidity*

In accordance with Accounting Standards Codification ("ASC") 205-40, *Going Concern*, the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the accompanying consolidated financial statements were issued.

As an emerging growth entity, the Company has devoted substantially all of its resources since inception to organizing and staffing the Company, business planning, raising capital, establishing its intellectual property portfolio, acquiring or discovering product candidates, research and development activities for THB001 and other compounds, establishing arrangements with third parties for the manufacture of its product candidates and component materials, and providing general and administrative support for these operations. As a result, the Company has incurred significant operating losses and negative cash flows from operations since its inception and anticipates such losses and negative cash flows will continue for the foreseeable future.

Since its inception, the Company has funded its operations primarily with proceeds from sales of shares of its redeemable convertible preferred stock. The Company has incurred recurring losses since its inception, including net losses of $12.8 million and $29.6 million for the years ended December 31, 2020, and 2021, respectively. In addition, as of December 31, 2021, the Company had an accumulated deficit of $48.2 million. To date the Company has not generated any revenues and expects to continue to generate operating losses for the foreseeable future.

As of May 13, 2022, the issuance date of these consolidated financial statements, the Company expects that its existing cash and cash equivalents of $128.3 million as of December 31, 2021, will be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months from the issuance date of these consolidated financial statements.

### *COVID-19 Pandemic*

The global coronavirus disease 2019 ("COVID-19"), pandemic continues to evolve, and we will continue to monitor the COVID-19 situation. The extent of the impact of the COVID-19 pandemic on the Company's

business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on the Company's contract development and manufacturing organizations ("CDMOs"), contract research organizations ("CROs"), and other third parties with whom the Company does business, as well as its impact on regulatory authorities and key scientific and management personnel. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. The Company's financial results for the years ended December 31, 2020, and 2021 were not significantly impacted by COVID-19, however, the Company cannot at this time predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its financial condition, operations, and business plans for 2022, including the timing and enrollment of patients in its planned clinical trials and other expected milestones of its lead product candidate.

**2. Summary of Significant Accounting Policies**

***Basis of Presentation and Consolidation***

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the operations of Third Harmonic Bio, Inc. and its wholly-owned subsidiary. Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the ASC and as amended by Accounting Standards Updates ("ASUs") of the Financial Accounting Standards Board ("FASB"). All intercompany accounts, transactions, and balances have been eliminated in consolidation.

***Use of Estimates***

The preparation of the Company's consolidated financial statements in conformity with GAAP requires management 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 consolidated financial statements, and the reported amounts of expenses during the reporting period. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the accrual of research and development expenses, and the valuations of common stock, preferred stock tranche liability, and anti-dilution right liability. The Company bases its estimates on historical experience when available, known trends and other market-specific data, or other relevant factors that it believes to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates when there are changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

***Segment Information***

Operating segments are defined as components of an enterprise for which separate and discrete information is available for evaluation by the chief operating decision-maker in deciding how to allocate resources and assess performance. The Company has one operating segment. The Company's focus is the research and development of the treatment of allergic and inflammatory diseases. The Company's chief operating decision maker, its chief executive officer, manages the Company's operations on a consolidated basis for the purpose of allocating resources.

***Cash and Cash Equivalents***

The Company considers all highly liquid investments purchased with original maturities of 90 days or less at acquisition to be cash equivalents. Cash and cash equivalents include standard checking accounts and amounts held in money market funds.

***Concentration of Credit Risk and Off-Balance Sheet Risk***

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents. Periodically, the Company maintains deposits in federally insured

financial institutions in excess of federally insured limits. The Company deposits its cash in financial institutions that it believes have high credit quality and has not experienced any losses on such accounts and does not believe it is exposed to any unusual credit risk beyond the normal credit risk associated with commercial banking relationships. As of December 31, 2020 and 2021, all of the Company's cash was held at one accredited financial institution. The Company has no financial instruments with off-balance-sheet risk of loss and has not experienced any losses on such accounts.

The Company is dependent on third-party CDMO's and CROs with whom it does business. In particular, the Company relies and expects to continue to rely on a small number of manufacturers to supply it with its requirements of active pharmaceutical ingredients and formulated drugs in order to perform research and development activities in its programs. The Company also relies on a limited number of third-party CROs to perform research and development activities on its behalf. These programs could be adversely affected by significant interruption from these providers.

***Fair Value Measurements***

Certain assets and liabilities of the Company are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

*Level 1*—Quoted prices in active markets for identical assets or liabilities.

*Level 2*—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.

*Level 3*—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The Company's preferred stock tranche liability and anti-dilution right liability are carried at fair value, determined according to Level 3 inputs in the fair value hierarchy described above.

An entity may choose to measure many financial instruments and certain other items at fair value at specified election dates. Subsequent unrealized gains and losses on items for which the fair value option has been elected will be reported in earnings.

***Research and Development Expenses***

Research and development costs are charged to expense as incurred. Research and development expenses are comprised of costs incurred in performing research and development activities, including personnel-related costs, stock-based compensation expense, clinical trial costs, contracted research services, research-related manufacturing, and other external costs.

The Company has entered into various research and development and other agreements with commercial firms, researchers, universities, and others for provisions of goods and services. These agreements are generally

cancelable, and the related costs are recorded as research and development expenses as incurred. Research and development expenses include costs for salaries, employee benefits, subcontractors, facility-related expenses, depreciation and amortization, stock-based compensation, laboratory supplies, and external costs of outside vendors engaged to conduct discovery, nonclinical and clinical development activities, and clinical trials as well as to manufacture clinical trial materials, and other costs.

Upfront payments, milestone payments and annual maintenance fees under license agreements are expensed in the period in which they are incurred, if the technology licensed has not reached technological feasibility and has no alternative future use.

Nonrefundable advance payments for goods and services to be received in the future for use in research and development activities are recorded as prepaid expenses and expenses as the related goods are delivered or the services are performed.

***Accrued Research and Development Expenses***

The Company has entered into various research and development contracts. The payments under these contracts are generally cancellable and are recorded as research and development expenses as incurred. The Company records accrued liabilities for estimated ongoing research and development costs. When evaluating the adequacy of the accrued liabilities, the Company analyzes the progress of the research and development activities, including the phase or completion of events, invoices received and contracted costs. Significant judgements and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates. The Company's historical accrual estimates have not been materially different from the actual costs.

***Patent Costs***

All patent-related costs incurred in connection with filing and prosecuting patent applications such as direct application fees, and legal and consulting expenses are expensed as incurred due to the uncertainty about the recovery of the expenditure. Patent-related costs are classified as general and administrative expenses within the Company's consolidated statements of operations.

***Leases***

The Company adopted FASB ASC 842 with an effective date of January 1, 2020, using the modified retrospective transition approach which uses the effective date as the date of initial application. In accordance with ASC 842, the Company determines whether an arrangement is or contains a lease at inception. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company classifies leases at the lease commencement date, when control of the underlying asset is transferred from the lessor to the lessee, as operating or finance leases and records a right-of-use ("ROU") asset and a lease liability on the consolidated balance sheet for all leases with an initial lease term of greater than 12 months. The Company has elected to not recognize leases with a lease term of 12 months or less on the balance sheet.

The Company enters into contracts that contain both lease and non-lease components. Non-lease components may include maintenance, utilities, and other operating costs. For leases of real estate, the Company combines the lease and associated non-lease components in its lease arrangements as a single lease component. Variable costs, such as utilities or maintenance costs, are not included in the measurement of right-of-use assets and lease liabilities, but rather are expensed when the event determining the amount of variable consideration to be paid occurs.

Lease assets and liabilities are recognized at the lease commencement date based on the present value of the lease payments over the lease term using the discount rate implicit in the lease if readily determinable. If the rate

implicit is not readily determinable, the Company utilizes an estimate of its incremental borrowing rate based upon the available information at the lease commencement date. ROU assets are further adjusted for initial direct costs, prepaid rent, or incentives received. Operating lease payments are expensed using the straight-line method as an operating expense over the lease term. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

***Redeemable Convertible Preferred Stock***

The Company has classified redeemable convertible preferred stock ("Preferred Stock") as temporary equity in the accompanying consolidated balance sheets due to terms that allow for redemption of the shares upon certain events that are outside of the Company's control. Costs incurred in connection with the issuance of redeemable convertible preferred stock, as well as the recognition of the preferred stock tranche liability, are recorded as a reduction of gross proceeds from issuance. The Company does not accrete the carrying values of the preferred stock to the redemption values since the occurrence of these events was not considered probable as of December 31, 2020 and 2021. Subsequent adjustments of the carrying values to the ultimate redemption values will be made only when it becomes probable that these events will occur.

***Preferred Stock Tranche Liability***

The Company classifies the preferred stock tranche liability for the future purchase, and option to purchase, preferred stock as a liability on its balance sheets as the preferred stock tranche liability is a freestanding financial instrument that will require the Company to transfer equity instruments upon subsequent closings of the preferred stock financings. The preferred stock tranche liability was initially recorded at fair value upon the date of issuance and was subsequently remeasured to fair value at each reporting date. Changes in the fair value of the preferred stock tranche liability are recognized as a component of other income and expense in the statements of operations. Changes in the fair value of the preferred stock tranche liability were recognized until the tranche liability were fulfilled or otherwise extinguished. As of December 31, 2021, the preferred stock tranche liability has been fulfilled or otherwise extinguished (see Note 6) in full.

***Anti-Dilution Right Liability***

The Company classifies the anti-dilution right under its license agreement with Novartis International Pharmaceutical Ltd. ("Novartis") as a derivative liability on its consolidated balance sheets as the anti-dilution right represents a freestanding financial instrument that may require the Company to transfer equity instruments upon future equity closings. The anti-dilution right liability was initially recorded at fair value upon the date of issuance and is subsequently remeasured to fair value at each reporting date. The issuance date fair value of the anti-dilution right liability was recognized as a research and development expense upon entering into the agreement with Novartis. Changes in the fair value of the anti-dilution right liability are recognized as a component of other income and expense in the statements of operations. Changes in the fair value of the antidilution right liability were recognized until the anti-dilution right with Novartis was satisfied in the first quarter of 2021, in connection with the closing of the second tranche of the Series A-2 redeemable convertible preferred stock ("Series A-2 Preferred Stock") and the issuance and sale of the Series A-3 redeemable convertible preferred stock ("Series A-3 Preferred Stock").

***Stock-Based Compensation***

The Company accounts for all share-based payment awards granted to employees and non-employees as stock-based compensation expense at fair value, based on the date of the grant, and recognizes compensation expense for those awards over the requisite service period, which is generally the vesting period of the respective award. The Company's share-based payments include stock options and grants of restricted stock awards. For stock-based awards with service-based vesting conditions, the Company recognizes compensation expense using the straight-line method. For awards with both performance and service-based vesting conditions, the Company

records expense using an accelerated attribution method, once the performance conditions are considered probable of being achieved, using management's best estimates.

The fair value of each stock option is estimated on the grant date using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions, including:

- *Fair Value of Common Stock*—We determined that based on our stage of development and other relevant factors, it was most appropriate to prepare our common stock valuations using the option-pricing method, or OPM, which used a market approach to estimate our enterprise value.
- *Expected Term*—The expected term represents the period that the stock-based awards are expected to be outstanding. We use the simplified method to determine the expected term, which is based on the average of the time-to-vesting and the contractual life of the options.
- *Expected Volatility*—Because we have been privately held and do not have any trading history for our 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 the similar size, stage in life cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- *Risk-Free Interest Rate*—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the awards.
- *Dividend Yield*—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

The fair value of each restricted common stock award is estimated on the date of grant based on the fair value of the Company's common stock on that same date. The Company utilizes significant estimates and assumptions in determining the fair value of its common stock. The Company has utilized various valuation methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation* (the "Practice Aid"), to estimate the fair value of its common stock. Each valuation methodology includes estimates and assumptions that require the Company's judgment.

These estimates and assumptions include a number of objective and subjective factors, including:

- contemporaneous valuations performed by an independent third-party valuation firm;
- our stage of development and material risks related to our business;
- the progress of our research and development programs, including the status and results of nonclinical studies and clinical trials;
- our business conditions and projections;
- sales of our preferred stock;
- the rights, preferences and privileges of our preferred stock relative to those of our common stock;
- lack of marketability of our common and preferred stock as a private company;
- our operating results and financial performance;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company, in light of prevailing market conditions;
- the trends, developments and conditions in the life sciences and biopharmaceutical industry sectors;
- analysis of initial public offerings and the market performance and stock price volatility of similar public companies in the life sciences and biopharmaceutical sectors; and
- the economy in general.

Significant changes to the key assumptions used in the valuations could result in different fair values of common stock at each valuation date.

The Company adopted ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU No. 2018-07") at inception of the 2019 Stock Incentive Plan, prior to the issuance of any stock option grants. The measurement date for non-employee awards is the date of grant without changes in the fair value of the award. Stock-based compensation costs for non-employees are recognized as expense over the vesting period on a straight-line basis.

Stock-based compensation expense is classified in the accompanying consolidated statement of operations in the same manner in which the award recipient's payroll costs are classified or in which the award recipients service payments are classified.

***Income Taxes***

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

Deferred tax assets are recognized to the extent that the Company believes that these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize deferred tax assets in the future in excess of their net recorded amount, the Company would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

The Company records uncertain tax positions in accordance with ASC 740 on the basis of a two-step process in which (i) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority.

Interest and penalties are recognized related to unrecognized tax benefits on the income tax expense line in the accompanying consolidated statement of operations. As of December 31, 2020 and 2021, no accrued interest or penalties are included on the related tax liability line in the consolidated balance sheet.

***Comprehensive Loss***

Comprehensive loss includes net loss as well as other changes in stockholders' deficit that result from transactions and economic events other than those with stockholders. For the years ended December 31, 2020 and December 31, 2021, there was no difference between net loss and comprehensive loss and accordingly a statement of comprehensive income is not presented.

***Net Income (Loss) Per Share***

The Company follows the two-class method when computing net income (loss) per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per share for each class of common and participating securities, which include the Company's redeemable convertible preferred stock, according to dividends declared or accumulated and participation rights in

undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

The Company's redeemable convertible preferred stock contractually entitles the holders of such shares to participate in dividends but does not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss attributable to common stockholders, such losses are not allocated to such participating securities. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is antidilutive. The Company reported a net loss attributable to common stockholders for years ended December 31, 2020, and 2021.

Basic net income (loss) per share attributable to common stockholders is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) attributable to common stockholders is computed by adjusting net income (loss) attributable to common stockholders to reallocate undistributed earnings based on the potential impact of diluted securities. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding for the period, including potential dilutive common shares. For the purpose of this calculation, unvested restricted common stock, outstanding stock options, and redeemable convertible preferred stock are considered potential dilutive common shares.

***Recent Accounting Pronouncements***

From time to time, new accounting pronouncements are issued by the FASB, or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the impact of recently issued standards that are not yet effective will not have a material impact on the Company's consolidated financial statements upon adoption. Under the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"), the Company meets the definition of an emerging growth company and has elected the extended transition period for complying with certain new or revised accounting standards pursuant to Section 107(b) of the JOBS Act. As noted below, certain new or revised accounting standards were early adopted.

***Emerging Growth Company Status***

The Company is an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

***Recently Adopted Accounting Pronouncements***

The Company early adopted ASU 2020-06, *Debt – Debt with Conversion and Other Options* (Subtopic 470-20) and *Derivatives and Hedging – Contracts in Entity's Own Equity* (Subtopic 815-40) ("ASU 2020-06"). The update simplifies the accounting for convertible debt instruments and convertible preferred stock by reducing the number of accounting models and limiting the number of embedded conversion features separately recognized from the primary contract. The guidance also includes targeted improvements to

the disclosures for convertible instruments and earnings per share. ASU 2020-06 is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. The Company adopted ASU 2020-06 effective January 1, 2021, using the modified retrospective method. The adoption did not have a material impact on the Company's financial statements.

In October 2020, the FASB issued ASU No. 2020-10 ("ASU-2010"), *Codification Improvements*, which updates various codification topics by clarifying or improving disclosure requirements to align with the SEC's regulations. The Company adopted this accounting standard as of January 1, 2021 with no material impact on its consolidated financial statements.

***Recently Issued Accounting Pronouncements Not Yet Adopted***

In December 2019, the Financial Accounting Standards Board (FASB) issued ASU No. 2019-12 ("ASU 2019-12") *Simplifying the Accounting for Income Tax*. The standard contains several provisions that reduce financial statement complexity including removing the exception to the incremental approach for intra-period tax expense allocation when a company has a loss from continuing operations and income from other items not included in continuing operations. The new guidance is effective for the year beginning January 1, 2022 with optional adoption prior to the effective date. The Company does not expect that the new standard will have a material impact on the Company's consolidated financial statements.

**3. Fair Value Measurements**

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis (in thousands):

| | | December 31, 2020 | | |
|---|---|---|---|---|
| Description | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Other Observable Inputs (Level 3) |
| *Liabilities* | | | | |
| Preferred stock tranche liability | $4,994 | | | $ 4,994 |
| Anti-dilution liability | 883 | | | 883 |
| Total financial liabilities | $5,877 | $ — | $ — | $ 5,877 |

| | | December 31, 2021 | | |
|---|---|---|---|---|
| Description | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Other Observable Inputs (Level 3) |
| *Assets* | | | | |
| Money market funds | $22,505 | $ 22,505 | | |
| Total financial assets | $22,505 | $ 22,505 | $ — | $ — |

As of December 31, 2020, the Company had no financial assets that required fair value measurement. As of December 31, 2021, the Company's cash equivalents consisted of money market funds, classified as Level 1 financial assets, as these assets are valued using quoted market prices in active markets without any valuation adjustment.

As of December 31, 2020, the Company had Level 3 financial liabilities that were measured at fair value on a recurring basis. The Company's preferred stock tranche liability and anti-dilution right liability were carried at fair value determined using Level 3 inputs in the fair value hierarchy. As of December 31, 2021, the preferred stock tranche liability and anti-dilution right liability have been waived or satisfied, and as such, there are no liabilities recorded as of December 31, 2021.

During the years ended December 31, 2020, and 2021 there were no transfers or reclassifications between fair value measure levels of liabilities. The carrying values of other current assets, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities.

***Preferred Stock Tranche Liability***

In connection with the issuance of the Series A-1 redeemable convertible preferred stock ("Series A-1 Preferred Stock"), Series A-2 Preferred Stock and Series A-3 Preferred Stock (see Note 6), the Company granted investors future tranche rights to purchase the respective preferred stock, which was classified as a liability on its consolidated balance sheets, as the preferred stock tranche liability is a freestanding financial instrument as it was determined to be legally detachable and required the Company to transfer the equity instruments at a fixed price upon the occurrence of certain events.

The fair value of the preferred stock tranche liabilities recognized in connection with the Company's Series A-1 Preferred Stock financing in July 2019, Series A-2 Preferred Stock financing in July 2020, and Series A-3 Preferred Stock financing in February 2021 were estimated based on results of a third party valuation performed in connection with each redeemable convertible preferred stock issuance.

The fair value of the preferred stock tranche liability was based on significant inputs not observable in the market, which represented a Level 3 measurement within the fair value hierarchy. A change in the assumptions related to the valuation of the preferred stock tranche liability could have a significant impact on the fair value. The preferred stock tranche liability was valued as a forward contract, using an option pricing model, specifically the Black-Scholes option pricing model. In determining the fair value of the preferred stock tranche liability, estimates and assumptions impacting the fair value included the estimated future values of the Company's Preferred Stock, discount rates, estimated time to tranche closing, and probability of each tranche closing. The Company remeasured the preferred stock tranche liability at each reporting period and prior to settlement.

The following table provides a rollforward of the aggregate fair value of the Company's preferred stock tranche liability (in thousands):

| | Preferred Stock Tranche Liability |
|---|---|
| Balance as of December 31, 2019 | $ 778 |
| Change in fair value | 1,081 |
| Fair value of liability established in connection with the issuance of Series A-2 Preferred Stock | 3,135 |
| Balance as of December 31, 2020 | 4,994 |
| Change in fair value | 9,927 |
| Settlement of liability in connection with the issuance of Series A-2 Preferred Stock | (825) |
| Extinguishment of Series A-2 tranche liability recorded to additional paid in capital | (750) |
| Fair value of liability established in connection with the issuance of Series A-3 Preferred Stock | 2,978 |
| Settlement of liability in connection with the issuance of Series A-3 Preferred Stock | (16,324) |
| Balance as of December 31, 2021 | $ — |

***Anti-Dilution Right Liability***

The anti-dilution right liability recognized in connection with the anti-dilution provisions set forth in the Company's license agreement with Novartis (see Note 5), represented a freestanding financial instrument that required the Company to transfer equity instruments upon future equity issuances for no additional consideration.

The fair value of the anti-dilution right liability was determined based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The fair value was estimated using a Monte Carlo analysis to simulate the fair value of the preferred stock to be issued to maintain the fully diluted ownership percentages based on the expected financing dates. Changes in the estimated fair value and the probability of achieving different financing scenarios can have a significant impact on the fair value of the anti-dilution right liability. The Company remeasured the anti-dilution right liability at each reporting period and prior to settlement.

The following table provides a rollforward of the aggregate fair value of the Company's anti-dilution right liability (in thousands):

| | Anti-Dilution Right Liability |
|---|---|
| Balance as of December 31, 2019 | $ 1,288 |
| Settlement of liability in connection with the issuance of Series A-1 Preferred Stock | (1,012) |
| Change in fair value | 607 |
| Balance as of December 31, 2020 | 883 |
| Settlement of liability in connection with the issuance of Series A-1 Preferred Stock | (1,565) |
| Change in fair value | 682 |
| Balance as of December 31, 2021 | $ — |

**4. Accrued Expenses and Other Current Liabilities**

Accrued expenses and other current liabilities consisted of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Accrued research and development expenses | $1,163 | $2,685 |
| Professional fees | 65 | 450 |
| Employee compensation and related benefits | 339 | 752 |
| Other | 66 | 2 |
| Total accrued expenses and other current liabilities | $1,633 | $3,889 |

**5. Novartis License Agreement**

On June 28, 2019, the Company entered into a License Agreement (the "Novartis License Agreement") with Novartis Pharma AG, formerly known as Novartis International Pharmaceutical Ltd, ("Novartis"). Pursuant to the Novartis License Agreement, the Company has been granted an exclusive, worldwide, royalty-bearing, sublicensable license under specified patent rights and know-how related to two licensed compounds to develop, make, use and sell certain products incorporating or comprising a licensed compound, including THB001 to certain intellectual property rights owned or controlled by Novartis (the "Licensed IP"), to research, develop, make, use, sell, and commercialize products containing the Licensed IP. Under the Novartis License Agreement, the Company is solely responsible for all research, development, regulatory and commercialization activities related to the Licensed IP. The Company is required to use commercially reasonable efforts to develop and seek regulatory approval for, and commercialize, at least one licensed product in the United States, France, Germany, Italy, Spain, the United Kingdom, and Japan.

In exchange for these rights, the Company made an upfront cash payment of $0.4 million and issued 3,449,808 shares of Series A-1 Preferred Stock with a fair value of $3.0 million to Novartis. The total initial consideration of $3.4 million transferred to Novartis was expensed as research and development expense upon entering into the agreement in 2019. The Company determined that the Novartis License Agreement represented an asset acquisition as it did not meet the definition of a business. The Company recorded the initial consideration transferred to Novartis as research and development expense in the statement of operations because the acquired Licensed IP represented in-process research and development with no alternative future use.

In addition, under the Novartis License Agreement, an anti-dilution right was issued to Novartis, in which Novartis is entitled to receive shares of Series A-1 Preferred Stock, guaranteeing them a 15% ownership interest of the fully diluted capitalization of the Company. The Company was obligated to issue additional shares of Series A-1 Preferred Stock until the Company had (1) raised aggregate cumulative proceeds of $30.0 million from sales of equity securities since its inception; or (2) issued and sold any securities that generate proceeds in excess of $30.0 million. Additionally, the Company was not obligated to issue more than 6,383,142 shares of the Series A-1 Preferred Stock to Novartis under the anti-dilution right. The Company assessed the Novartis anti-dilution right and determined that the right (i) meets the definition of a freestanding financial instrument that was not indexed to the Company's own stock and (ii) meets the definition of a derivative and did not qualify for equity classification. The initial fair value of the anti-dilution right liability of $1.0 million was recorded as research and development expense in July 2019, as part of the initial consideration in the license agreement. The Company remeasured the liability associated with the anti-dilution right at each reporting date and at each issuance of Series A-1 Preferred Stock under the anti-dilution right. Changes in the fair value were recorded as other income and expense in the statement of operations until the anti-dilution right was satisfied in February 2021 upon the Company raising aggregate cumulative proceeds of $30.0 million in sales of equity securities. As part of the anti-dilution right, the Company issued a total of 5,970,000 shares of Series A-1 Preferred Stock to Novartis. During the years ended December 31, 2020 and 2021, the Company recorded expense associated with changes in fair value of the anti-dilution right liability of $0.6 million and $0.7 million, respectively. Refer to Note 3 for a summary in the changes of the anti-dilution rights during the years ended December 31, 2020 and December 31, 2021.

Under the Novartis License Agreement, the Company is obligated to make aggregate milestone payments of up to $231.7 million related to the achievement of specified development, commercialization, and sales milestones. The Company records the milestone payments as research and development expense when the milestones occur and consideration is paid or becomes payable. As of December 31, 2021, the Company has made two development milestone payments under the Novartis Agreement totaling $1.0 million, of which $0.4 million achieved and paid in 2019, and $0.6 million was achieved and paid in the year ended December 31, 2020, which have been recorded as research and development expense. No other milestones have occurred or have been paid have been made under the Novartis License Agreement.

As part of the Novartis License Agreement, the Company also agreed to pay tiered royalties based on future net sales of all products licensed under the agreement, of which the royalty percentage ranged within the single digits.

**6. Redeemable Convertible Preferred Stock**

As of December 31, 2020 and 2021, the Company's certificate of incorporation, as amended and restated (the "Amended and Restated Certificate of Incorporation") authorized the Company to issue 33,970,000 and 49,624,190 shares of preferred stock, respectively, with a par value of $0.0001 per share.

***Series A-1 Redeemable Convertible Preferred Stock***

In June 2019, the Company's board of directors (the "Board") authorized the issuance and sale of 14,383,142 shares of Series A-1 Preferred Stock. On July 3, 2019, the Company entered into a Series A-1 Preferred Stock purchase agreement (the "Series A-1 Agreement") with Atlas Venture Fund XI, L.P. ("Atlas"), in

which the Company issued and sold an aggregate of 8,000,000 shares of Series A-1 Preferred Stock with a par value of $0.0001 and at a purchase price of $1.00 per share, resulting in gross proceeds of $8.0 million (the "Series A-1 First Tranche Closing"). Included within the Series A-1 Agreement were two additional future tranche obligations (the "Series A Second Tranche" and "Series A Third Tranche") for the Company to issue and sell shares of Series A-2 Preferred Stock. Upon execution of the Company's license agreement with Novartis in July 2019, the Company issued an additional 3,449,808 shares of Series A-1 Preferred Stock (see Note 5).

The Series A Second Tranche obligated the Company to issue and sell 2,666,667 shares of Series A-2 Preferred Stock to Atlas, and up to 2,666,667 shares of Series A-2 Preferred Stock to additional investors, each at a purchase price of $1.50 per share. The issuance of shares under the Series A Second Tranche was contingent to occur following a determination by the holders of a majority of the then outstanding Series A-1 Preferred Stock.

The Series A Third Tranche obligated the Company to issue and sell 4,666,667 shares of Series A-2 Preferred Stock to Atlas, and up to 4,666,667 shares of Series A-2 Preferred Stock to additional investors, each at a purchase price of $1.50 per share. The issuance of shares under the Series A Third Tranche was contingent to occur following a determination by the holders of a majority of the combined voting power of the then outstanding shares of Series A-1 Preferred Stock and Series A-2 Preferred Stock, calculated on an as converted common stock basis.

The Company concluded that the rights to participate in the Series A Second Tranche and Series A Third Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-1 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-1 Preferred Stock, the Company recognized a preferred stock tranche liability of $1.0 million, with a corresponding reduction to the carrying value of the Series A Preferred Stock. At the issuance of the Series A-1 Preferred Stock in July 2019, the carrying value was $7.0 million, equal to the gross proceeds of $8.0 million, reduced by the fair value of the preferred stock tranche liability of $1.0 million, and issuance costs of $55 thousand. Both the Series A Second Tranche and Series A Third Tranche were foregone by the investors in July 2020, upon entering into the Series A-2 Preferred Stock Agreement (as defined below). At the time, the Company wrote down the liability associated with the Series A Second Tranche and Series A Third Tranche liability to zero, resulting in a gain of $0.8 million recorded in the Company's consolidated statements of operations within other income (expense), net during the year ended December 31, 2020.

In July 2020, upon entering into the Series A-2 Agreement (as defined below), the Company issued an additional 1,297,153 shares of Series A-1 Preferred Stock to Novartis, and in February 2021, upon the closing of the Series A-2 Second Tranche (as defined below) and entering into the Series A-3 Agreement (as defined below), the Company issued an additional 1,223,039 shares of Series A-1 Preferred Stock to Novartis, which issuances were pursuant to the anti-dilution right clause included in the Novartis License (see Note 5).

***Series A-2 Redeemable Convertible Preferred Stock***

In June 2019, at the same time the Board authorized the issuance of the Series A-1 Preferred Stock, the Board authorized the issuance of 14,666,667 shares of Series A-2 Preferred Stock. On July 13, 2020, the Company entered into a Series A-2 Preferred Stock purchase agreement (the "Series A-2 Agreement") with Atlas and OrbiMed Private Investments VII, LP ("OrbiMed"), in which the Company issued and sold an aggregate of 6,875,000 shares of Series A-2 Preferred Stock with a par value of $0.0001 and at a purchase price of $1.60 per share, resulting in gross proceeds of $11.0 million (the "Series A-2 First Tranche Closing"). Included within the Series A-2 Agreement were two additional future tranches obligations (the "Series A-2 Second Tranche" and "Series A-2 Third Tranche") for the Company to issue and sell shares of Series A-2 Preferred Stock.

The Series A-2 Second Tranche obligated the Company to issue and sell an aggregate of 6,875,000 shares of Series A-2 Preferred Stock to Atlas and OrbiMed, each at a purchase price of $1.60 per share. The issuance of

shares under the Series A-2 Second Tranche was contingent upon Atlas and OrbiMed's waiver or approval and satisfaction of the Company's GLP Toxicology Studies of the Company's lead compound (the "Series A-2 Second Tranche Milestone Event").

The Series A-2 Third Tranche obligated the Company to issue and sell an aggregate of 6,250,000 shares of Series A-2 redeemable convertible preferred stock to Atlas and OrbiMed, each at a purchase price of $1.60 per share. The issuance of shares under the Series A-2 Third Tranche was contingent upon Atlas and OrbiMed's waiver or approval and satisfaction of safety data from the Phase 1a trial of the Company's lead compound (the "Series A-2 Third Tranche Milestone Event").

The Company concluded that the rights to participate in the Series A-2 Second Tranche and Series A-2 Third Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-2 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-2 Preferred Stock, the Company recognized a preferred stock tranche liability of $3.1 million, with a corresponding reduction to the carrying value of the Series A-2 Preferred Stock. At the issuance of the Series A-2 Preferred Stock in July 2020, the carrying value was $7.7 million, equal to the gross proceeds of $11.0 million, reduced by the fair value of the preferred stock tranche liability of $3.1 million, and issuance costs of $0.2 million.

In February 2021, upon waiver by Atlas and Orbimed, an aggregate of 6,875,000 shares of Series A-2 Preferred Stock were issued and sold under the Series A-2 Second Tranche, resulting in gross proceeds of $11.0 million. Prior to the issuance and sale of shares under Series A-2 Second Tranche, the Company remeasured the tranche liability associated with the Series A-2 Second Tranche and Series A-2 Third Tranche, which resulted in a gain of $3.4 million that was recorded to other income and expense during the year ended December 31, 2021. The fair value of the Series A-2 tranche liability at the time of the closing of the Series A-2 Second Tranche of $0.8 million was recorded a part of the carrying value of the Series A-2 Preferred Stock. The Series A-2 Third Tranche was forgone by Atlas and OrbiMed upon entering into the Series A-3 Preferred Stock Agreement (as defined below). The Company wrote off the fair value of the Series A-2 Third Tranche liability, which resulted in a gain of $0.8 million that was recorded to additional paid-in capital during the year ended December 31, 2021.

***Series A-3 Redeemable Convertible Preferred Stock***

In February 2021, the Board authorized the issuance and sale of 7,812,501 shares of Series A-3 Preferred Stock. On February 24, 2021, the Company entered into a Series A-3 Preferred Stock purchase agreement (the "Series A-3 Agreement") with Biotechnology Value Fund, LP ("BVF"), in which the Company issued and sold an aggregate of 1,953,125 shares of Series A-3 Preferred Stock with a par value of $0.0001 and at a purchase price of $2.56 per share, resulting in gross proceeds of $5.0 million (the "Series A-3 First Tranche Closing"). Included within the Series A-3 Agreement was an additional future tranche liability (the "Series A-3 Second Tranche") for the Company to issue and sell shares of Series A-3 Preferred Stock.

The Series A-3 Second Tranche obligated the Company to issue and sell an aggregate of 5,859,376 shares of Series A-3 Preferred Stock to Atlas, OrbiMed, and BVF (collectively the "Existing Investors") each at a purchase price of $2.56 per share. The issuance of shares under the Series A-3 Second Tranche was contingent upon the determination by the Board that certain data from the Company's Phase 1a clinical trial for its lead compound supported the progression to a Phase 1b clinical trial (the "Series A-3 Second Tranche Milestone Event") or a waiver by the Existing Investors.

The Company concluded that the rights to participate in the Series A-3 Second Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-3 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-3 Preferred Stock, the

Company recognized a preferred stock tranche liability of $3.0 million, with a corresponding reduction to the carrying value of the Series A-3 Preferred Stock. At the issuance of the Series A-3 Preferred Stock in February 2021, the carrying value was $2.0 million, equal to the gross proceeds of $5.0 million, reduced by the fair value of the preferred stock tranche liability of $3.0 million, and issuance costs of $40 thousand.

In November 2021, upon waiver by the Existing Investors, 5,859,376 shares of Series A-3 Preferred Stock were issued and sold to the Existing Investors under the Series A-3 Second Tranche, resulting in gross proceeds of $15.0 million. Prior to the issuance and sale of shares under Series A-3 Second Tranche, the Company remeasured the tranche liability associated with the Series A-3 Second Tranche, which resulted in expense of $13.3 million that was recorded to other income and expense during the year ended December 31, 2021. The fair value of the tranche liability at the time of the closing of the Series A-3 Second Tranche of $16.3 million was recorded a part of the carrying value of the Series A-3 Preferred Stock.

***Series B Redeemable Convertible Preferred Stock***

In December 2021, the Board authorized the issuance and sale of 14,091,689 shares of Series B redeemable convertible preferred stock ("Series B Preferred Stock"). On December 17, 2021, the Company entered into a Series B Preferred Stock purchase agreement (the "Series B Agreement") with various investors, both new and existing, in which the Company issued and sold an aggregate of 14,091,686 shares of Series B Preferred Stock with a par value of $0.0001 and at a purchase price of $7.45 per share, resulting in gross proceeds of $105.0 million. At the issuance of the Series B Preferred Stock, the carrying value was $104.8 million, equal to the gross proceeds of $105.0 million, reduced by issuance costs of $0.2 million.

Upon issuance of each class of Series A and Series B Preferred Stock, the Company assessed the embedded conversion and liquidation features of the shares and determined that such features did not require the Company to separately account for these features.

As of each balance sheet date, the Preferred Stock consisted of the following (in thousands, except share amounts):

| | December 31, 2020 | | | | |
|---|---|---|---|---|---|
| | Preferred Stock Authorized | Preferred Stock Issued and Outstanding | Carrying Value | Liquidation Value | Common Stock Issuable Upon Conversion |
| Series A-1 Preferred Stock | 13,970,000 | 12,746,961 | $11,008 | $ 12,747 | 5,642,745 |
| Series A-2 Preferred Stock | 20,000,000 | 6,875,000 | 7,691 | 11,000 | 3,043,381 |
| Total | 33,970,000 | 19,621,961 | $18,699 | $ 23,747 | 8,686,126 |

| | December 31, 2021 | | | | |
|---|---|---|---|---|---|
| | Preferred Stock Authorized | Preferred Stock Issued and Outstanding | Carrying Value | Liquidation Value | Common Stock Issuable Upon Conversion |
| Series A-1 Preferred Stock | 13,970,000 | 13,970,000 | $ 12,574 | $ 13,970 | 6,184,150 |
| Series A-2 Preferred Stock | 13,750,000 | 13,750,000 | 19,476 | 22,000 | 6,086,762 |
| Series A-3 Preferred Stock | 7,812,501 | 7,812,501 | 33,288 | 20,000 | 3,458,386 |
| Series B Preferred Stock | 14,091,689 | 14,091,686 | 104,846 | 105,000 | 6,238,018 |
| Total | 49,624,190 | 49,624,187 | $ 170,184 | $ 160,970 | 21,967,316 |

The holders of the Preferred Stock have the following rights, preferences and privileges:

*Voting*

The holder of each share of Preferred Stock is entitled to one vote for each share of common stock into which it would convert and to vote with the common stock on all matters presented to the stockholders of the Company.

The holders of Series A Preferred Stock, voting exclusively and as a separate class, are entitled to elect four directors of the Company. The holders of Series B Preferred Stock, voting exclusively and as a separate class, are entitled to elect one director of the Company.

*Conversion*

Each share of Preferred Stock is convertible, at the option of the holder, 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 for each series of Preferred Stock (as defined below). The conversion price, and the rate at which each series of preferred stock may be converted into common stock, are subject to adjustment from time to time to reflect future share dividends, splits, combinations, recapitalizations and similar events.

Further, each share of Preferred Stock shall automatically be converted into shares of common stock at the conversion rate at the time in effect for such series of Preferred Stock immediately upon either of: (i) the closing of the Company's sale of common stock to the public at a price per share of at least $16.83 per share in an initial public offering (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the applicable class of common stock), resulting in at least $75.0 million of proceeds, net of the underwriting discount and commissions; or (ii) the date and time, or occurrence of an event, specified by vote or written consent of the requisite holders of at least 65% of the combined voting power of the shares of Preferred Stock then outstanding as calculated on an as-converted to common stock basis.

*Dividends*

The holders of the Preferred Stock are entitled to receive dividends at the rate of 8% of the applicable original issue price per annum. Dividends shall not be cumulative or compounded and shall be payable only when, as and if declared by the Board and in preference and in priority to any dividends on common stock. There have been no dividends declared by the Board as of December 31, 2020 and 2021.

*Liquidation Preference*

In the event of any liquidation, dissolution, or winding up of the Company ("Liquidation Event"), the holders of Preferred Stock (first to the holders of Series B Preferred Stock, then to the holders of Series A-3 Preferred Stock, then to the holders of Series A-2 Preferred Stock, then to the holders of Series A-1 Preferred Stock) are entitled to receive prior and in preference to the holders of common stock, an amount equal to an amount per share equal to the greater of the original issue price, plus all declared and unpaid dividends on the Preferred Stock or the price per share that would be received if the Preferred Stock were converted to common stock. If the assets and funds available to be distributed to all holders of Preferred Stock are insufficient to permit the payment, in full, of any of the liquidation preferences, then the entire assets and funds legally available for distribution to holders of the Preferred Stock shall be distributed ratably among the holders of Preferred Stock, acting as a single class, at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

After the payment of the full liquidation preference of the Preferred Stock as set forth above, the remaining assets of the Company legally available for distribution in such liquidation event shall be distributed ratably to the holders of shares of common stock.

*Redemption*

The Preferred Stock is not redeemable at the option of the holder thereof except for in the event of a Liquidation Event if the corporation does not effect a dissolution under the general corporation law within 90 days after such Liquidation Event.

**7. Common Stock**

As of December 31, 2020 and 2021, the Company's Amended and Restated Certificate of Incorporation authorized the Company to issue 50,000,000 and 72,731,000 shares of common stock, respectively, with a par value of $0.0001.

The voting, dividend and liquidation rights of the holders of the Company's common stock are subject to and qualified by the rights, preferences and privileges of the holders of the preferred stock as set forth above.

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 shall not be entitled to vote on any amendment to the Amended and Restated Certificate of Incorporation. There are not any cumulative voting rights. The number of authorized shares of common stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the shares of capital stock of the Company; however, the issuance of common stock may be subject to the vote of the holders of one or more series of preferred stock that may be required by terms of the Amended and Restated Certificate of Incorporation.

As of December 31, 2020, and 2021, the Company has reserved the following shares of common stock for the potential conversion of outstanding preferred stock, the exercise of stock options, and the vesting of restricted common stock:

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Preferred stock, as converted | 8,686,126 | 21,967,316 |
| Options to purchase common stock | 384,396 | 394,254 |
| Unvested restricted common stock | 1,059,418 | 1,907,102 |
| Remaining shares reserved for future issuance | 3,294,458 | 2,065,764 |
| Total | 13,424,398 | 26,334,436 |

**8. Stock-Based Compensation**

***2019 Stock Incentive Plan***

The Company adopted the 2019 Stock Incentive Plan (the "2019 Plan") in July 2019 pursuant to which the Company can issue incentive stock options, stock appreciation rights, restricted stock, restricted stock units, and other stock-based awards. The 2019 Plan is administered by the Board or, at the discretion of the Board, by a committee delegated by Board. The exercise prices, vesting and other restrictions are determined at the discretion of the Board, or its committee if so delegated, except that the exercise price per share of stock options may not be less than 100% of the fair market value of the share of common stock on the date of grant and the term of stock option may not be greater than ten years. The Company's Board values the Company's common stock, taking into consideration its most recently available valuation of common stock performed by third party valuation specialists as well as additional factors which may have changed since the date of the most recent contemporaneous valuation through the date of grant. The 2019 Plan was subsequently amended on various dates throughout 2020 and 2021, with each amendment increasing the number of awards issuable under the plan. As of December 31, 2021, there were 5,063,021 shares of common stock that were issuable under the 2019 Plan, of which there were 394,254 stock options granted and 2,603,003 restricted stock granted. As of December 31, 2021, 2,065,764 shares of common stock remained available for future grant under the 2019 Plan.

Shares that are expired, terminated, surrendered or canceled under the 2019 Plan without having been fully exercised will be available for future awards.

***Stock Options***

The Company has granted stock options with both service-based and performance-based vesting conditions. Stock options typically vest over four years and have a maximum term of ten years. The Company typically grants stock options to employees and non-employees at exercise prices deemed by the Board to be equal to the fair value of the common stock at the time of grant. For accounting purposes, a retrospective fair value assessment of the common stock was performed to determine the fair value of the Company's common stock and to calculate stock-based compensation expense. These reassessed values were based, in part, upon third-party valuations of our common stock prepared as of each grant date on a retrospective basis. The third-party valuations were prepared using the hybrid method and used market approaches to determine our enterprise value.

The Company utilized the Black-Scholes option-pricing model to estimate the fair value of stock options awarded to employees. The Black-Scholes option-pricing model requires several key assumptions. The key assumptions used to apply this pricing model were as follows:

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Expected term (in years) | 6.06 | 6.06 |
| Expected volatility | 84.0 - 85.6% | 82.4 - 84.2% |
| Risk-free interest rate | 0.37 - 0.54% | 0.87 - 1.20% |
| Expected dividend yield | — | — |
| Fair value of common stock | $ 1.03 | $ 1.90 |

The following table summarizes the Company's stock option activity under the 2019 Plan:

| | Number of Shares | Weighted-Average Exercise Price | Weighted-Average Remaining Contractual Term (in years) | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|---|
| Outstanding as of December 31, 2020 | 384,396 | 0.45 | 9.91 | $ 321 |
| Granted | 159,204 | 1.44 | | |
| Exercised | — | — | | |
| Forfeited or cancelled | (149,346) | 0.45 | | |
| Outstanding as of December 31, 2021 | 394,254 | 0.85 | 9.08 | $ 3,297 |
| Options vested and exercisable as of December 31, 2021 | 46,617 | 0.45 | 8.80 | $ 409 |
| Options unvested as of December 31, 2021 | 347,637 | 0.90 | 9.12 | $ 2,889 |

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock.

The weighted-average grant-date fair value per share of stock options granted during the years ended December 31, 2020 and 2021 was $0.84 and $1.41, respectively. As of December 31, 2021, there was $0.3 million of unrecognized stock-based compensation expense related to unvested stock options, to be recognized over a weighted-average period of 3.45 years.

The total fair value of options vested during the year ended December 31, 2021was $40 thousand.

Included within the total stock options outstanding are 135,071 stock options to purchase common stock which have performance-based vesting criteria and were granted to certain employees, officers and consultants of

the Company on various dates during the years ended December 31, 2020 and 2021 (collectively, the "Performance Stock Options"). Vesting of 37,133 of the Performance Stock Options was contingent on the closing of the Series A-2 Second Tranche, which occurred on February 24, 2021, and vesting of the remaining 97,938 Performance Stock Options was contingent on the closing of the Series A-3 Second Tranche, which occurred on November 15, 2021. The vesting commencement date of the Performance Stock Options was the date in which the performance condition is met, and vesting occurs based on the accelerated attribution method over four years from the vesting commencement date. The Company began to recognize expense associated with the Performance Stock Options on the date in which each respective performance criteria was met and recognized total stock-based compensation expense associated with the Performance Stock Options of $30 thousand for the year ended December 31, 2021. No expense associated with the Performance Stock Options was recognized prior to the year ended December 31, 2021.

***Restricted Common Stock Awards***

The Company has granted restricted common stock awards with service and performance and service based vesting conditions to employees of the Company. Unvested shares of restricted common stock may not be sold or transferred by the holder, except for transfers for estate planning purposes in which the transferee agrees to remain bound by all restrictions set forth in the original common stock purchase agreement. These restrictions lapse over the vesting term of each award, which is typically four years. The purchase price of each share of restricted common stock was $0.0001 per share.

On August 9, 2021, the Company's chief executive office ("CEO") purchased 1,218,836 shares of common stock at a purchase price of 1.44 per share, under the terms of a restricted common stock award granted under the 2019 Plan. These shares were purchased in exchange for a promissory note (the "Promissory Note") of $1.8 million. The shares granted include both service and performance-based vesting criteria. Of the shares granted, (i) 269,044 shares are to vest upon the completion of one year of service measured from August 9, 2021 (the "Vesting Commencement Date"); (ii) 807,134 shares are to vest in a series of successive equal quarterly installments of 6.25% upon the CEO's completion of each additional quarter of service over a three year period from the first anniversary of the Vesting Commencement Date; and (iii) 142,658 shares (the "Performance Shares") are subject to vesting upon the occurrence of the Series A-3 Second Tranche closing, which occurred on November 15, 2021. Upon the occurrence of the Series A-3 Second Tranche closing, 35,664 of the Performance Shares vest on the first anniversary of the Vesting Commencement Date, and the remaining 106,994 Performance Shares vest in a series of successive equal quarterly installments of 6.25% upon the CEO's completion of each additional quarter of service over a three year period from the first anniversary of the Vesting Commencement Date. The Company may purchase all of the unvested shares following the employee's termination at the original purchase price. As of December 31, 2021, none of the shares granted have vested.

The Promissory Note accrues interest at a rate of 0.76% per annum, compounded annually, and are repayable at the earlier of (i) the seventh anniversary from the date of the Promissory Note; (ii) ninety days after termination of the CEO's service to the Company; or (iii) a change in control of the Company. Further, the principal and accrued but unpaid interest of the Promissory Note is to be repaid prior to the Company becoming an issuer within the meaning of the Sarbanes-Oxley Act of 2022. The Promissory Note is collateralized by a pledge of certain assets of the employee, and is a partial recourse note. The Company has accounted for the Promissory Note as non-recourse in its entirety as the recourse and non-recourse portion of the Promissory Note are not directly aligned with a corresponding percentage of the underlying shares. The non-recourse notes received by the Company as consideration for the issuance of the restricted stock has been considered a stock option for accounting purposes as the substance is similar to the grant of an option until the note is settled. The fair value of the restricted stock granted to the CEO in exchange for the Promissory Note is estimated on the grant date using the Black-Scholes option pricing model. The exercise price is the principal due on the Promissory Note. The fair value of the award is recognized over the requisite service period (not the term of the

Promissory Note) through a charge to compensation cost. The grant date fair value of the restricted stock granted to the CEO was estimated using the following assumptions:

| | December 31, 2021 |
|---|---|
| Expected term (in years) | 6.53 |
| Expected volatility | 82.4% |
| Risk-free interest rate | 0.92% |
| Expected dividend yield | — |
| Fair value of common stock | $ 1.90 |

A summary of the activity of the restricted common stock under the 2019 Plan was as follows:

| | Number of Shares | Weighted-Average Grant Date Fair Value Per Share |
|---|---|---|
| Unvested at December 31, 2020 | 1,059,418 | $ 0.71 |
| Granted | 1,218,836 | 1.43 |
| Vested | (371,152) | 0.84 |
| Unvested at December 31, 2021 | 1,907,102 | $ 1.17 |

The weighted-average grant-date fair value per share of restricted common stock awards granted during the years ended December 31, 2020, and 2021 was $1.03 and $1.43, respectively. The aggregate fair value of restricted stock awards that vested during the year ended December 31, 2020 and 2021 was $0.2 million and $0.3 million, respectively. Stock-based compensation expense recognized for the restricted stock granted was $0.2 million and $0.5 million as of December 31, 2020 and 2021, respectively. As of December 31, 2021 there was unrecognized expense of $2.0 million related to the restricted stock, which is expected to be recognized over a weighted-average period of 3.25 years.

***Stock-Based Compensation Expense***

Stock-based compensation expense included in the Company's consolidated statements of operations was as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Research and development | $134 | $224 |
| General and administrative | 61 | 286 |
| Total stock-based compensation expense | $195 | $510 |

**9. Income Taxes**

Income (loss) before provision for income taxes consisted of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Domestic | $(12,807) | $(29,609) |
| Foreign | — | — |
| Loss before provision for income taxes | $(12,807) | $(29,609) |

A reconciliation of the Company's statutory income tax rate to the Company's effective income tax rate is as follows:

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Income at US statutory rate | 21.00% | 21.00% |
| State taxes, net of federal benefit | 6.07 | 3.43 |
| Permanent differences | (2.11) | (7.36) |
| Tax credits | 2.39 | 1.03 |
| Tax law change | 0.00 | 0.00 |
| Foreign rate differential | 0.00 | 0.00 |
| Valuation allowance | (27.35) | (18.21) |
| Other | 0.00 | 0.00 |
| Total | 0.00% | 0.00% |

The net deferred income tax asset balance related to the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Intangibles | $ 1,205 | $ 1,613 |
| Accrued expenses & other | 90 | 252 |
| Anti-dilution liability | 241 | — |
| Net operating loss carryforwards | 3,232 | 7,935 |
| Credits | 413 | 774 |
| Total deferred tax assets | 5,181 | 10,574 |
| Valuation allowance | (5,181) | (10,574) |
| Net deferred tax assets (liability) | $ — | $ — |

As of December 31, 2020 and 2021, the Company had a federal net operating loss carryforward of $11.9 million and $29.8 million, which can be carried forward indefinitely. As of December 31, 2020 and 2021, the Company has state NOL carryforwards of $11.8 million and $26.7 million. The state net operating loss carryforwards begin to expire in 2039.

As of December 31, 2021, the Company also has federal and state tax credits of $0.7 million and $0.2 million, which being to expire in 2039 and 2039, respectively.

Future realization of the tax benefits of existing temporary differences and net operating loss carryforwards ultimately depends on the existence of sufficient taxable income within the carryforward period. As of December 31, 2020 and 2021, the Company performed an evaluation to determine whether a valuation allowance was needed. The Company considered all available evidence, both positive and negative, which included the results of operations for the current and preceding years. The Company determined that it was not possible to reasonably quantify future taxable income and determined that it is more likely than not that all of the deferred tax assets will not be realized. Accordingly, the Company maintained a full valuation allowance as of December 31, 2020 and 2021.

Under Internal Revenue Code Section 382, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We have not completed a study to assess whether an "ownership change" has occurred or whether there have been multiple ownership changes since we became a "loss corporation" as defined in

Section 382. Future changes in our stock ownership, which may be outside of our control, may trigger an “ownership change.” In addition, future equity offerings or acquisitions that have equity as a component of the purchase price could result in an “ownership change.” If an “ownership change” has occurred or does occur in the future, utilization of the NOL carryforwards or other tax attributes may be limited, which could potentially result in increased future tax liability to us.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations for both federal taxes and the many states in which we operate or do business in. ASC 740 states that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, on the basis of the technical merits.

We record uncertain tax positions as liabilities in accordance with ASC 740 and adjust these liabilities when our judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the unrecognized tax benefit liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which new information is available. As of December 31, 2020 and 2021, we have not recorded any uncertain tax positions in our financial statements.

We recognize interest and penalties related to unrecognized tax benefits on the income tax expense line in the accompanying consolidated statement of operations. As of December 31, 2020and 2021, no accrued interest or penalties are included on the related tax liability line in the consolidated balance sheet.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending tax examinations. The Company’s tax years are still open under statute from December 31, 2018, to the present. The resolution of tax matters is not expected to have a material effect on the Company’s consolidated financial statements.

**10. Net Loss Per Share**

The following table sets forth the computation of the Company’s basic and diluted net loss per share for the periods presented (in thousands, except share and per share amounts):

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Numerator: | | |
| Net loss | $ 12,807 | $ 29,609 |
| Net loss attributable to common stockholders, basic and diluted | $ 12,807 | $ 29,609 |
| Denominator: | | |
| Weighted-average number of common shares used in net loss per share, basic and diluted | 3,668,072 | 4,043,416 |
| Net loss per share of common stock, basic and diluted | $ 3.49 | $ 7.32 |

The Company excluded the following shares from the computation of diluted net loss per share attributable to common stockholders as of December 31, 2020 and 2021 because including them would have had an anti-dilutive effect:

| | December 31, | |
|---|---|---|
| | 2020 | 2021 |
| Redeemable convertible preferred stock | 8,686,126 | 21,967,316 |
| Options to purchase common stock | 384,396 | 394,254 |
| Unvested restricted stock | 1,059,418 | 1,907,102 |
| Total | 10,129,940 | 24,268,672 |

**11. Commitments and Contingencies**

***Legal Proceedings***

From time to time, in the ordinary course of business, the Company is subject to litigation and regulatory examinations as well as information gathering requests, inquiries and investigations. As of December 31, 2020 and 2021, there were no matters which would have a material impact on the Company's financial results.

***Leases***

The Company's operating leases are comprised of month-to-month office space leases entered into with Atlas for various office suites located at 400 Technology Square in Cambridge, Massachusetts, with the Company acting as a subtenant. Given the short-term nature of the leases, and as the Company has elected to not recognize leases with a lease term of 12 months or less on the balance sheet, as further described in Note 2, no operating lease ROU asset and liability has been recognized as of December 31, 2020, and 2021. For the years ended December 31, 2020, and 2021, the Company has recognized short-term lease expense of $48 thousand and $0.1 million, respectively.

**12. Related Party Transactions**

***Atlas***

Atlas is a significant beneficial owner of the Company, holding more than 5% of the total outstanding stock of the Company, as of December 31, 2020, and 2021. The Company leases various office space from Atlas for use in its daily operations. During each of the years ended December 31, 2020 and 2021 the Company made payments of $0.2 million associated with the lease agreements with Atlas, which was recorded within general and administrative expense.

***Novartis***

Novartis is a significant beneficial owner of the Company, holding more than 5% of the total outstanding stock of the Company, as of December 31, 2020, and 2021. The Company has an in-license agreement with Novartis, which required the Company to make an upfront payment and issue shares of Series A-1 Preferred Stock to Novartis, and further includes future milestone payments upon the occurrence of certain events and royalty payments upon future sales. Refer to Note 5.

***CEO Promissory Note***

On August 9, 2021, the Company entered into the Promissory Note with the CEO for an amount of $1.8 million, which was used to allow the CEO to purchase 1,218,836 shares of common stock granted in the form of a restricted stock award under the 2019 Plan. The Promissory Note has a stated interest rate of 0.76%,

which is compounded annually, and matures upon the earlier of (i) the seventh anniversary from the date of the Promissory Note; (ii) ninety days after termination of the CEO's service to the Company; or (iii) a change in control of the Company. Further, the principal and accrued but unpaid interest of the Promissory Note is to be repaid prior to the Company becoming an issuer within the meaning of the Sarbanes-Oxley Act of 2022. As of December 31, 2021, the entire amount of the Promissory Note remained outstanding. See Note 8.

***Consulting Agreements***

In June 2019, the Company entered into a consulting agreement with Mark Iwicki, the chairman of the Board, for consulting services. Pursuant to this agreement, Mr. Iwicki was granted a restricted stock award for 47,100 shares of the Company's common stock, with 1/48th of the shares subject to the award vesting in equal monthly installments. The Company recognized stock-based compensation of $8 thousand for the years ended December 31, 2020 and 2021, associated with the agreement which was recorded within general and administrative expense.

In July 2019, the Company entered into a consulting agreement with H. Martin Seidel, in connection with his appointment to the Board and the Company's scientific advisory board, for consulting services. The Company will make payments of $25,000 per year for such consulting services, payable quarterly in arrears. In addition, Dr. Seidel was granted a restricted stock award of 75,360 shares of the Company's common stock, with 25% of the shares subject to the award vesting on July 25, 2020 and the remaining shares vesting in equal quarterly installments thereafter until July 25, 2023. The Company recognized stock-based compensation of $13 thousand for the years ended December 31, 2020 and 2021, associated with the agreement which was recorded within general and administrative expense.

**13. Employee Benefit Plans**

Effective January 1, 2019, the Company adopted a 401(k) Plan for its employees, which is designed to be qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted to contribute to the 401(k) Plan within statutory and 401(k) Plan limits. Since inception of the plan and through the year ended December 31, 2021 the Company has not made any contributions to the 401(k) Plan.

**14. Subsequent Events**

The Company has completed an evaluation of all subsequent events after the audited balance sheet date of December 31, 2021 through May 13, 2022, the date these financial statements were issued, and September 9, 2022 for the reverse stock split referenced below. to ensure that these financial statements include appropriate disclosure of events both recognized in the financial statements as of December 31, 2020 and 2021 and events which occurred subsequently but were not recognized in the accompanying consolidated financial statements. No subsequent events have occurred that require disclosure, except for those referenced below.

The Company's Board approved a one-for-2.259 reverse stock split of its issued and outstanding common stock and stock options effective as of September 7, 2022. Accordingly, all share and per share amounts for all periods presented in the accompanying financial statements and notes thereto have been retroactively adjusted, where applicable, to reflect the reverse stock split.

**THIRD HARMONIC BIO, INC.**
**CONDENSED CONSOLIDATED BALANCE SHEETS**
**(In thousands, except share and per share amounts)**
**(Unaudited)**

| | December 31, 2021 | June 30, 2022 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 128,280 | $ 112,731 |
| Prepaid expenses and other current assets | 884 | 610 |
| Total current assets | 129,164 | 113,341 |
| Other assets | — | 1,090 |
| Total assets | $ 129,164 | $ 114,431 |
| **Liabilities, redeemable convertible preferred stock and stockholders' deficit** | | |
| Current liabilities: | | |
| Accounts payable | $ 1,797 | $ 2,436 |
| Accrued expenses and other current liabilities | 3,889 | 2,368 |
| Total current liabilities | 5,686 | 4,804 |
| Total liabilities | 5,686 | 4,804 |
| Commitments and contingencies (Note 11) | | |
| Series A-1 redeemable convertible preferred stock, par value $0.0001. 13,970,000 shares authorized as of December 31, 2021 and June 30, 2022; 13,970,000 shares issued and outstanding as of December 31, 2021 and June 30, 2022; liquidation preference of $13,970 as of December 31, 2021 and June 30, 2022 | 12,574 | 12,574 |
| Series A-2 redeemable convertible preferred stock, par value $0.0001. 13,750,000 shares authorized as of December 31, 2021 and June 30, 2022; 13,750,000 shares issued and outstanding as of December 31, 2021 and June 30, 2022; liquidation preference of $22,000 as of December 31, 2021 and June 30, 2022 | 19,476 | 19,476 |
| Series A-3 redeemable convertible preferred stock, par value $0.0001. 7,812,501 shares authorized as of December 31, 2021 and June 30, 2022; 7,812,501 shares issued and outstanding as of December 31, 2021 and June 30, 2022; liquidation preference of $20,000 as of December 31, 2021 and June 30, 2022 | 33,288 | 33,288 |
| Series B redeemable convertible preferred stock, par value $0.0001. 14,091,689 shares authorized as of December 31, 2021 and June 30, 2022; 14,091,686 shares issued and outstanding as of December 31, 2021 and June 30, 2022; liquidation preference of $105,000 as of December 31, 2021 and June 30, 2022 | 104,846 | 104,846 |
| Stockholders' deficit: | | |
| Common stock, par value $0.0001. 72,731,000 shares authorized as of December 31, 2021 and June 30, 2022; 4,237,290 and 4,416,054 shares issued and outstanding as of December 31, 2021 and June 30, 2022, respectively | 1 | 1 |
| Additional paid-in capital | 1,534 | 3,143 |
| Accumulated deficit | (48,241) | (63,701) |
| Total stockholders' deficit | (46,706) | (60,557) |
| Total liabilities, redeemable convertible preferred stock and stockholders' deficit | $ 129,164 | $ 114,431 |

*The accompanying notes are an integral part of these condensed consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**
**(In thousands, except share and per share amounts)**
**(Unaudited)**

| | Six Months Ended June 30, | |
|---|---|---|
| | 2021 | 2022 |
| Operating expenses: | | |
| Research and development | $ 6,546 | $ 10,393 |
| General and administrative | 1,010 | 5,177 |
| Total operating expenses | 7,556 | 15,570 |
| Loss from operations | 7,556 | 15,570 |
| Other (income) expense, net: | | |
| Change in fair value of anti-dilution right liability | 682 | — |
| Change in fair value of preferred stock tranche liability | (1,790) | — |
| Other income | (2) | (110) |
| Total other (income) expense, net | (1,110) | (110) |
| Net loss | $ 6,446 | $ 15,460 |
| Net loss per share of common stock, basic and diluted | $ 1.64 | $ 3.58 |
| Weighted-average common stock outstanding, basic and diluted | 3,939,670 | 4,321,267 |

*The accompanying notes are an integral part of these condensed consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT**
**(In thousands, except share amounts)**
**(Unaudited)**

| | Redeemable Convertible Preferred Stock | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Series A-1 | | Series A-2 | | Series A-3 | | Common Stock | | Additional Paid-In Capital | Accumulated Deficit | Total Stockholders' Deficit |
| | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | | | |
| **Balance at December 31, 2020** | 12,746,961 | $11,008 | 6,875,000 | $ 7,691 | — | $ — | 3,866,138 | $ 1 | $ 274 | (18,632) | $ (18,357) |
| Issuance of Series A-2 redeemable convertible preferred stock under Series A-2 Second Tranche, net of issuance costs of $40 | — | — | 6,875,000 | 11,785 | — | — | — | — | — | — | — |
| Gain on extinguishment of Series A-2 redeemable convertible preferred stock tranche liability | — | — | — | — | — | — | — | — | 750 | — | 750 |
| Issuance of Series A-1 redeemable convertible preferred stock under anti-dilution liability | 1,223,039 | 1,566 | — | — | — | — | — | — | — | — | — |
| Issuance of Series A-3 redeemable convertible preferred stock, net of issuance costs of $40 | — | — | — | — | 1,953,125 | 1,982 | — | — | — | — | — |
| Vesting of restricted stock | — | — | — | — | — | — | 203,108 | — | — | — | — |
| Stock-based compensation expense | — | — | — | — | — | — | — | — | 138 | — | 138 |
| Net loss | — | — | — | — | — | — | — | — | — | (6,446) | (6,446) |
| **Balance at June 30, 2021** | 13,970,000 | $12,574 | 13,750,000 | $19,476 | 1,953,125 | $1,982 | 4,069,246 | $ 1 | $ 1,162 | (25,078) | $ (23,915) |

**THIRD HARMONIC BIO, INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT**
**(In thousands, except share amounts)**
**(Unaudited) (continued)**

| | Redeemable Convertible Preferred Stock | | | | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Series A-1 | | Series A-2 | | Series A-3 | | Series B | | Common Stock | | Additional Paid-In Capital | Accumulated Deficit | Stockh Defi |
| | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | | | |
| **Balance at December 31, 2021** | 13,970,000 | $12,574 | 13,750,000 | $19,476 | 7,812,501 | $33,288 | 14,091,686 | $104,846 | 4,237,290 | $ 1 | $ 1,534 | $ (48,241) | $ (4 |
| Vesting of restricted stock | — | — | — | — | — | — | — | — | 178,764 | — | — | — | |
| Stock-based compensation expense | — | — | — | — | — | — | — | — | — | — | 1,609 | — | |
| Net loss | — | — | — | — | — | — | — | — | — | — | — | (15,460) | (1 |
| **Balance at June 30, 2022** | 13,970,000 | $12,574 | 13,750,000 | $19,476 | 7,812,501 | $33,288 | 14,091,686 | $104,846 | 4,416,054 | $ 1 | $ 3,143 | $ (63,701) | $ (6 |

*The accompanying notes are an integral part of these condensed consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**CODENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In thousands, except share and per share amounts)**
**(Unaudited)**

| | Six Months Ended June 30, | |
|---|---|---|
| | 2021 | 2022 |
| **Cash flows from operating activities:** | | |
| Net loss | $ (6,446) | $ (15,460) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Stock-based compensation expense | 138 | 1,609 |
| Change in fair value of preferred stock tranche liability | (1,790) | — |
| Change in fair value of anti-dilution liability | 682 | — |
| Changes in operating assets and liabilities: | | |
| Prepaid expenses and other current assets | (316) | 274 |
| Other assets | — | — |
| Accounts payable | 885 | 365 |
| Accrued expenses and other current liabilities | (404) | (1,640) |
| Net cash used in operating activities | (7,251) | (14,852) |
| **Cash flows from investing activities:** | | |
| Net cash used in investing activities | — | — |
| **Cash flows from financing activities:** | | |
| Proceeds from issuance of preferred stock, net of issuance costs | 15,921 | — |
| Payment of offering costs | — | (697) |
| Net cash provided by (used in) financing activities | 15,921 | (697) |
| Net increase (decrease) in cash and cash equivalents | 8,670 | (15,549) |
| Cash and cash equivalents at beginning of period | 8,277 | 128,280 |
| Cash and cash equivalents at end of period | $ 16,946 | $ 112,731 |
| **Supplemental disclosure of cash flows:** | | |
| Deferred offering costs in accounts payable and accrued expenses | $ — | $ 393 |
| **Supplemental disclosure of non-cash financing activity:** | | |
| Preferred stock tranche liability established in connection with the issuance of redeemable convertible preferred stock | $ 2,979 | $ — |
| Issuance of redeemable convertible preferred stock in settlement of preferred stock tranche liability | $ 825 | $ — |
| Gain on extinguishment of preferred stock tranche liability recorded to additional paid in capital | $ 750 | $ — |
| Issuance of redeemable convertible preferred stock in settlement of anti-dilution right liability | $ 1,565 | $ — |

*The accompanying notes are an integral part of these condensed consolidated financial statements.*

**THIRD HARMONIC BIO, INC.**
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**
**(Unaudited)**

## 1. Nature of the Business

Third Harmonic Bio, Inc., ("Third Harmonic" or the "Company") is a clinical-stage biopharmaceutical company focused on development of the next wave of medicine for the treatment of allergic and inflammatory diseases.

The Company was incorporated in 2019 as a Delaware corporation, and has principal offices in Cambridge, Massachusetts. In December 2021, the Company formed THB MS, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, which is classified as a Security Corporation in Massachusetts.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, completion and success of clinical testing, development by competitors of new technological innovations, compliance with governmental regulations, dependence on key personnel and protection of proprietary technology and the ability to secure additional capital to fund operations. THB001 will require extensive clinical testing prior to regulatory approval and commercialization. These efforts require significant amounts of additional capital, adequate personnel, and infrastructure and extensive compliance-reporting capabilities. Even if the Company's drug development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

### *Liquidity*

In accordance with Accounting Standards Codification ("ASC") 205-40, *Going Concern*, the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the accompanying condensed consolidated financial statements were issued.

As an emerging growth entity, the Company has devoted substantially all of its resources since inception to organizing and staffing the Company, business planning, raising capital, establishing its intellectual property portfolio, acquiring or discovering product candidates, research and development activities for THB001 and other compounds, establishing arrangements with third parties for the manufacture of its product candidates and component materials, and providing general and administrative support for these operations. As a result, the Company has incurred significant operating losses and negative cash flows from operations since its inception and anticipates such losses and negative cash flows will continue for the foreseeable future.

Since its inception, the Company has funded its operations primarily with proceeds from sales of shares of its redeemable convertible preferred stock. The Company has incurred recurring losses since its inception, including net losses of $6.4 million and $15.5 million for the six months ended June 30, 2021 and 2022, respectively. As of June 30, 2022, the Company had an accumulated deficit of $63.7 million. To date the Company has not generated any revenues and expects to continue to generate operating losses for the foreseeable future.

The Company expects that its existing cash and cash equivalents of $112.7 million as of June 30, 2022, will be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months from the issuance date of these condensed consolidated financial statements.

### *COVID-19 Pandemic*

The global coronavirus disease 2019 ("COVID-19") pandemic continues to evolve, and the Company will continue to monitor the ongoing COVID-19 pandemic. The extent of the impact of the ongoing COVID-19

pandemic on the Company's business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on the Company's contract development and manufacturing organizations ("CDMOs"), contract research organizations ("CROs"), and other third parties with whom the Company does business, as well as its impact on regulatory authorities and key scientific and management personnel. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. The Company's financial results for the periods ended December 31, 2021 and June 30, 2022 were not significantly impacted by the ongoing COVID-19 pandemic, however, the Company cannot at this time predict the specific extent, duration, or full impact that the ongoing COVID-19 pandemic will have on its financial condition, operations, and business plans for 2022, including the timing and enrollment of patients in its planned clinical trials and other expected milestones of its lead product candidate.

**2. Summary of Significant Accounting Policies**

The Company's significant accounting policies are disclosed in the audited consolidated annual financial statements for the years ended December 31, 2020 and 2021, included elsewhere in this prospectus. Since the date of those annual financial statements, there have been no changes to the Company's significant accounting policies, except as noted below.

***Unaudited Interim Financial Information***

The accompanying unaudited interim condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), for interim financial reporting and as required by Regulation S-X, Rule 10-01. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated annual financial statements for the years ended December 31, 2020 and 2021, and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the Company's condensed consolidated balance sheet as of June 30, 2022, the condensed consolidated statements of operations for the six months ended June 30, 2021 and 2022, the condensed consolidated statements of changes in redeemable convertible preferred stock and stockholders' deficit for the six months ended June 30, 2021 and 2022 and condensed consolidated statements of cash flows for the six months ended June 30, 2021 and 2022. The financial data and other information disclosed in these notes related to the six months ended June 30, 2021 and 2022 are unaudited. The results for the six months ended June 30, 2022 are not necessarily indicative of results to be expected for the year ending December 31, 2022, any other interim periods, or any future year or period.

***Deferred Issuance Costs***

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with the in-process equity financing as deferred issuance costs until such financing is consummated. After consummation of such equity financing, these costs are recorded as a reduction of the proceeds generated as a result of the offering within additional paid in capital. Should the planned equity financing be abandoned, the deferred issuance costs, currently recorded within other assets, will be expensed immediately as a charge to operating expenses in the statements of operations. The Company did not record any deferred issuance costs as of December 31, 2021, and recorded deferred issuance costs of $1.1 million within other assets as of June 30, 2022.

***Recent Accounting Pronouncements***

From time to time, new accounting pronouncements are issued by the FASB, or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the impact of recently issued standards that are not yet effective will not have a material impact on the Company's condensed consolidated financial statements upon adoption. Under the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"), the Company meets the definition of an emerging growth company and has elected the extended transition period for complying with certain new or revised accounting standards pursuant to Section 107(b) of the JOBS Act.

In December 2019, the FASB issued ASU No. 2019-12 ("ASU-2019-12"), *Simplifying the Accounting for Income Tax*, which contains several provisions that reduce financial statement complexity including removing the exception to the incremental approach for intra-period tax expense allocation when a company has a loss from continuing operations and income from other items not included in continuing operations. The Company adopted this accounting standard as of January 1, 2022 with no material impact on its condensed consolidated financial statements.

### 3. Fair Value Measurements

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis (in thousands):

| | | December 31, 2021 | | |
|---|---|---|---|---|
| Description | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Other Observable Inputs (Level 3) |
| Assets | | | | |
| Money market funds | $22,505 | $ 22,505 | — | — |
| Total financial assets | $22,505 | $ 22,505 | $ — | $ — |

| | | June 30, 2022 | | |
|---|---|---|---|---|
| Description | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Other Observable Inputs (Level 3) |
| Assets | | | | |
| Money market funds | $26,013 | $ 26,013 | — | — |
| Total financial liabilities | $26,013 | $ 26,013 | $ — | $ — |

As of December 31, 2021 and June 30, 2022, the Company had no financial liabilities that required fair value measurement. As of December 31, 2021 and June 30, 2022, the Company's cash equivalents consisted of money market funds, classified as Level 1 financial assets, as these assets are valued using quoted market prices in active markets without any valuation adjustment.

During the year ended December 31, 2021 and six months ended June 30, 2022 there were no transfers or reclassifications between fair value measurement levels of assets or liabilities. The carrying values of other current assets, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities.

### 4. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

| | December 31, 2021 | June 30, 2022 |
|---|---|---|
| Accrued research and development expenses | $ 2,685 | $1,217 |
| Professional fees | 450 | 447 |
| Employee compensation and related benefits | 752 | 704 |
| Other | 2 | — |
| Total accrued expenses and other current liabilities | $ 3,889 | $2,368 |

**5. Novartis License Agreement**

On June 28, 2019, the Company entered into a License Agreement (the "Novartis License Agreement") with Novartis Pharma AG, formerly known as Novartis International Pharmaceutical Ltd, ("Novartis"). Pursuant to the Novartis License Agreement, the Company has been granted an exclusive, worldwide, royalty-bearing, sublicensable license under specified patent rights and know-how related to two licensed compounds, to develop, make, use and sell certain products incorporating or comprising a licensed compound, including THB001, to certain intellectual property rights owned or controlled by Novartis (the "Licensed IP"), to research, develop, make, use, sell, and commercialize products containing the Licensed IP.

Under the Novartis License Agreement, the Company is solely responsible for all research, development, regulatory and commercialization activities related to the Licensed IP. The Company is required to use commercially reasonable efforts to develop and seek regulatory approval for, and commercialize, at least one licensed product in each of the United States, France, Germany, Italy, Spain, the United Kingdom, and Japan.

In exchange for these rights, the Company made an upfront cash payment of $0.4 million and issued 3,449,808 shares of Series A-1 Preferred Stock with a fair value of $3.0 million to Novartis. Upon entering into the Novartis License Agreement in 2019, the total initial consideration of $3.4 million transferred to Novartis was charged to expenses as research and development expense. The Company determined that the Novartis License Agreement represented an asset acquisition as it did not meet the definition of a business. The Company recorded the initial consideration transferred to Novartis as research and development expense in the statement of operations because the acquired Licensed IP represented in-process research and development with no alternative future use.

In addition, under the Novartis License Agreement, an anti-dilution right was issued to Novartis, in which Novartis is entitled to receive shares of Series A-1 Preferred Stock, guaranteeing them a 15% ownership interest of the fully diluted capitalization of the Company. The Company was obligated to issue additional shares of Series A-1 Preferred Stock until the Company had (1) raised aggregate cumulative proceeds of $30.0 million from sales of equity securities since its inception; or (2) issued and sold any securities that generate proceeds in excess of $30.0 million. Additionally, the Company was not obligated to issue more than 6,383,142 shares of the Series A-1 Preferred Stock to Novartis under the anti-dilution right. The Company assessed the Novartis anti-dilution right and determined that the right (i) meets the definition of a freestanding financial instrument that is not indexed to the Company's own stock and (ii) meets the definition of a derivative and does not qualify for equity classification. The initial fair value of the anti-dilution right liability of $1.0 million was recorded as research and development expense in July 2019, as part of the initial consideration in the license agreement. The Company remeasured the liability associated with the anti-dilution right at each reporting date and at each issuance of Series A-1 Preferred Stock under the anti-dilution right. Changes in the fair value were recorded as other income and expense in the statement of operations until the anti-dilution right was satisfied in February 2021 upon the Company raising aggregate cumulative proceeds of $30.0 million in sales of equity securities. As part of the anti-dilution right, the Company issued a total of 5,970,000 shares of Series A-1 Preferred Stock to Novartis. During the six months ended June 30, 2021, the Company recorded an expense associated with changes in fair value of the anti-dilution right liability of $0.7 million. No expense was recognized during the six months ended June 30, 2022 as the anti-dilution liability was satisfied in February 2021.

Under the Novartis License Agreement, the Company is obligated to make aggregate milestone payments of up to $231.7 million related to the achievement of specified development, commercialization, and sales milestones. The Company records the milestone payments as research and development expenses when the milestones occur and consideration is paid or becomes payable. As of June 30, 2022, the Company has made two development milestone payments under the Novartis Agreement totaling $1.0 million, of which $0.4 million was achieved and paid in 2019, and $0.6 million was achieved and paid in 2020, which have been recorded as research and development expense. No other milestones have occurred or have been paid have been made under the Novartis License Agreement.

As part of the Novartis License Agreement, the Company also agreed to pay tiered royalties based on future net sales of all products licensed under the agreement, of which the royalty percentage ranged within the single digits.

**6. Redeemable Convertible Preferred Stock**

As of December 31, 2021 and June 30, 2022, the Company's certificate of incorporation, as amended and restated (the "Amended and Restated Certificate of Incorporation") authorized the Company to issue 49,624,187 shares of preferred stock, with a par value of $0.0001 per share.

***Series A-1 Redeemable Convertible Preferred Stock***

In June 2019, the Company's board of directors (the "Board") authorized the issuance and sale of 14,383,142 shares of Series A-1 Preferred Stock. On July 3, 2019, the Company entered into a Series A-1 Preferred Stock purchase agreement (the "Series A-1 Agreement") with Atlas Venture Fund XI, L.P. ("Atlas"), in which the Company issued and sold an aggregate of 8,000,000 shares of Series A-1 Preferred Stock with a par value of $0.0001 and at a purchase price of $1.00 per share, resulting in gross proceeds of $8.0 million (the "Series A-1 First Tranche Closing"). Included within the Series A-1 Agreement were two additional future tranche obligations (the "Series A Second Tranche" and "Series A Third Tranche") for the Company to issue and sell shares of Series A-2 Preferred Stock. Upon execution of the Company's license agreement with Novartis in July 2019, the Company issued an additional 3,449,808 shares of Series A-1 Preferred Stock (see Note 5).

The Series A Second Tranche obligated the Company to issue and sell 2,666,667 shares of Series A-2 Preferred Stock to Atlas, and up to 2,666,667 shares of Series A-2 Preferred Stock to additional investors, each at a purchase price of $1.50 per share. The issuance of shares under the Series A Second Tranche was contingent to occur following a determination by the holders of a majority of the then outstanding Series A-1 Preferred Stock.

The Series A Third Tranche obligated the Company to issue and sell 4,666,667 shares of Series A-2 Preferred Stock to Atlas, and up to 4,666,667 shares of Series A-2 Preferred Stock to additional investors, each at a purchase price of $1.50 per share. The issuance of shares under the Series A Third Tranche was contingent to occur following a determination by the holders of a majority of the combined voting power of the then outstanding shares of Series A-1 Preferred Stock and Series A-2 Preferred Stock, calculated on an as converted common stock basis.

The Company concluded that the rights to participate in the Series A Second Tranche and Series A Third Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-1 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-1 Preferred Stock, the Company recognized a preferred stock tranche liability of $1.0 million, with a corresponding reduction to the carrying value of the Series A Preferred Stock. At the issuance of the Series A-1 Preferred Stock in July 2019, the carrying value was $7.0 million, equal to the gross proceeds of $8.0 million, reduced by the fair value of the preferred stock tranche liability of $1.0 million, and issuance costs of $55 thousand. Both the Series A Second Tranche and Series A Third Tranche were foregone by the investors in July 2020, upon entering into the Series A-2 Preferred Stock Agreement (as defined below). At the time, the Company wrote down the liability associated with the Series A Second Tranche and Series A Third Tranche liability to zero, resulting in a gain of $0.8 million recorded in the Company's consolidated statements of operations within other (income) expense, net during the year ended December 31, 2020.

In July 2020, upon entering into the Series A-2 Agreement (as defined below), the Company issued an additional 1,297,153 shares of Series A-1 Preferred Stock to Novartis, and in February 2021, upon the closing of the Series A-2 Second Tranche (as defined below) and entering into the Series A-3 Agreement (as defined below), the Company issued an additional 1,223,039 shares of Series A-1 Preferred Stock to Novartis, which issuances were pursuant to the anti-dilution right clause included in the Novartis License (see Note 5).

***Series A-2 Redeemable Convertible Preferred Stock***

In June 2019, at the same time the Board authorized the issuance of the Series A-1 Preferred Stock, the Board authorized the issuance of 14,666,667 shares of Series A-2 Preferred Stock. On July 13, 2020, the Company entered into a Series A-2 Preferred Stock purchase agreement (the "Series A-2 Agreement") with Atlas and OrbiMed Private Investments VII, LP ("OrbiMed"), in which the Company issued and sold an aggregate of 6,875,000 shares of Series A-2 Preferred Stock with a par value of $0.0001 and at a purchase price of $1.60 per share, resulting in gross proceeds of $11.0 million (the "Series A-2 First Tranche Closing"). Included within the Series A-2 Agreement were two additional future tranches obligations (the "Series A-2 Second Tranche" and "Series A-2 Third Tranche") for the Company to issue and sell shares of Series A-2 Preferred Stock.

The Series A-2 Second Tranche obligated the Company to issue and sell an aggregate of 6,875,000 shares of Series A-2 Preferred Stock to Atlas and OrbiMed, each at a purchase price of $1.60 per share. The issuance of shares under the Series A-2 Second Tranche was contingent upon Atlas and OrbiMed's waiver or approval and satisfaction of the Company's GLP Toxicology Studies of the Company's lead compound (the "Series A-2 Second Tranche Milestone Event").

The Series A-2 Third Tranche obligated the Company to issue and sell an aggregate of 6,250,000 shares of Series A-2 redeemable convertible preferred stock to Atlas and OrbiMed, each at a purchase price of $1.60 per share. The issuance of shares under the Series A-2 Third Tranche was contingent upon Atlas and OrbiMed's waiver or approval and satisfaction of safety data from the Phase 1a trial of the Company's lead compound (the "Series A-2 Third Tranche Milestone Event").

The Company concluded that the rights to participate in the Series A-2 Second Tranche and Series A-2 Third Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-2 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-2 Preferred Stock, the Company recognized a preferred stock tranche liability of $3.1 million, with a corresponding reduction to the carrying value of the Series A-2 Preferred Stock. At the issuance of the Series A-2 Preferred Stock in July 2020, the carrying value was $7.7 million, equal to the gross proceeds of $11.0 million, reduced by the fair value of the preferred stock tranche liability of $3.1 million, and issuance costs of $0.2 million.

In February 2021, upon waiver by Atlas and OrbiMed, an aggregate of 6,875,000 shares of Series A-2 Preferred Stock were issued and sold under the Series A-2 Second Tranche, resulting in gross proceeds of $11.0 million. Prior to the issuance and sale of shares under Series A-2 Second Tranche, the Company remeasured the tranche liability associated with the Series A-2 Second Tranche and Series A-2 Third Tranche, which resulted in a gain of $3.4 million that was recorded to other income and expense during the year ended December 31, 2021. The fair value of the Series A-2 tranche liability at the time of the closing of the Series A-2 Second Tranche of $0.8 million was recorded a part of the carrying value of the Series A-2 Preferred Stock. The Series A-2 Third Tranche was forgone by Atlas and OrbiMed upon entering into the Series A-3 Preferred Stock Agreement (as defined below). The Company wrote off the fair value of the Series A-2 Third Tranche liability, which resulted in a gain of $0.8 million that was recorded to additional paid-in capital during the year ended December 31, 2021.

***Series A-3 Redeemable Convertible Preferred Stock***

In February 2021, the Board authorized the issuance and sale of 7,812,501 shares of Series A-3 Preferred Stock. On February 24, 2021, the Company entered into a Series A-3 Preferred Stock purchase agreement (the "Series A-3 Agreement") with Biotechnology Value Fund, LP ("BVF"), in which the Company issued and sold an aggregate of 1,953,125 shares of Series A-3 Preferred Stock with a par value of $0.0001 and at a purchase price of $2.56 per share, resulting in gross proceeds of $5.0 million (the "Series A-3 First Tranche Closing"). Included within the Series A-3 Agreement was an additional future tranche liability (the "Series A-3 Second Tranche") for the Company to issue and sell shares of Series A-3 Preferred Stock.

The Series A-3 Second Tranche obligated the Company to issue and sell an aggregate of 5,859,376 shares of Series A-3 Preferred Stock to Atlas, OrbiMed, and BVF (collectively the "Existing Investors") each at a purchase price of $2.56 per share. The issuance of shares under the Series A-3 Second Tranche was contingent upon the determination by the Board that certain data from the Company's Phase 1a clinical trial for its lead compound supported the progression to a Phase 1b clinical trial (the "Series A-3 Second Tranche Milestone Event") or a waiver by the Existing Investors.

The Company concluded that the rights to participate in the Series A-3 Second Tranche met the definition of a freestanding financial instrument that was required to be recognized as a liability at fair value as (i) the instruments were legally detachable from the Series A-3 Preferred Stock and (ii) required the Company to transfer equity instruments upon future events. Upon the issuance of the Series A-3 Preferred Stock, the Company recognized a preferred stock tranche liability of $3.0 million, with a corresponding reduction to the carrying value of the Series A-3 Preferred Stock. At the issuance of the Series A-3 Preferred Stock in February 2021, the carrying value was $2.0 million, equal to the gross proceeds of $5.0 million, reduced by the fair value of the preferred stock tranche liability of $3.0 million, and issuance costs of $40 thousand.

In November 2021, upon waiver by the Existing Investors, 5,859,376 shares of Series A-3 Preferred Stock were issued and sold to the Existing Investors under the Series A-3 Second Tranche, resulting in gross proceeds of $15.0 million. Prior to the issuance and sale of shares under Series A-3 Second Tranche, the Company remeasured the tranche liability associated with the Series A-3 Second Tranche, which resulted in expense of $13.3 million that was recorded to other income and expense during the year ended December 31, 2021. The fair value of the tranche liability at the time of the closing of the Series A-3 Second Tranche of $16.3 million was recorded a part of the carrying value of the Series A-3 Preferred Stock.

***Series B Redeemable Convertible Preferred Stock***

In December 2021, the Board authorized the issuance and sale of 14,091,689 shares of Series B redeemable convertible preferred stock ("Series B Preferred Stock"). On December 17, 2021, the Company entered into a Series B Preferred Stock purchase agreement (the "Series B Agreement") with various investors, both new and existing, in which the Company issued and sold an aggregate of 14,091,686 shares of Series B Preferred Stock with a par value of $0.0001 and at a purchase price of $7.45 per share, resulting in gross proceeds of $105.0 million. At the issuance of the Series B Preferred Stock, the carrying value was $104.8 million, equal to the gross proceeds of $105.0 million, reduced by issuance costs of $0.2 million.

Upon issuance of each class of Series A and Series B Preferred Stock, the Company assessed the embedded conversion and liquidation features of the shares and determined that such features did not require the Company to separately account for these features.

As of December 31, 2021 and June 30, 2022, the redeemable convertible preferred stock consisted of the following (in thousands, except share amounts):

| | Preferred Stock Authorized | Preferred Stock Issued and Outstanding | Carrying Value | Liquidation Value | Common Stock Issuable Upon Conversion |
|---|---|---|---|---|---|
| Series A-1 Preferred Stock | 13,970,000 | 13,970,000 | $ 12,574 | $ 13,970 | 6,184,150 |
| Series A-2 Preferred Stock | 13,750,000 | 13,750,000 | 19,476 | 22,000 | 6,086,762 |
| Series A-3 Preferred Stock | 7,812,501 | 7,812,501 | 33,288 | 20,000 | 3,458,386 |
| Series B Preferred Stock | 14,091,689 | 14,091,686 | 104,846 | 105,000 | 6,238,018 |
| Total | 49,624,190 | 49,624,187 | $ 170,184 | $ 160,970 | 21,967,316 |

The holders of the preferred stock have the following rights, preferences and privileges:

*Voting*

The holder of each share of preferred stock is entitled to one vote for each share of common stock into which it would convert and to vote with the common stock on all matters presented to the stockholders of the Company.

The holders of Series A Preferred Stock, voting exclusively and as a separate class, are entitled to elect four directors of the Company. The holders of Series B Preferred Stock, voting exclusively and as a separate class, are entitled to elect one director of the Company.

*Conversion*

Each share of preferred stock is convertible, at the option of the holder, 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 for each series of preferred stock (as defined below). The conversion price, and the rate at which each series of preferred stock may be converted into common stock, are subject to adjustment from time to time to reflect future share dividends, splits, combinations, recapitalizations and similar events.

Further, each share of preferred stock shall automatically be converted into shares of common stock at the conversion rate at the time in effect for such series of preferred stock immediately upon either of: (i) the closing of the Company's sale of common stock to the public at a price per share of at least $16.83 per share in an initial public offering (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the applicable class of common stock), resulting in at least $75.0 million of proceeds, net of the underwriting discount and commissions; or (ii) the date and time, or occurrence of an event, specified by vote or written consent of the requisite holders of at least 65% of the combined voting power of the shares of preferred stock then outstanding as calculated on an as-converted to common stock basis.

*Dividends*

The holders of the preferred stock are entitled to receive dividends at the rate of 8% of the applicable original issue price per annum. Dividends shall not be cumulative or compounded and shall be payable only when, as and if declared by the Board and in preference and in priority to any dividends on common stock. There have been no dividends declared by the Board as of December 31, 2021 and June 30, 2022.

*Liquidation Preference*

In the event of any liquidation, dissolution, or winding up of the Company ("Liquidation Event"), the holders of preferred stock (first to the holders of Series B Preferred Stock, then to the holders of Series A-3 Preferred Stock, then to the holders of Series A-2 Preferred Stock, then to the holders of Series A-1 Preferred Stock) are entitled to receive prior and in preference to the holders of common stock, an amount equal to an amount per share equal to the greater of the original issue price, plus all declared and unpaid dividends on the preferred stock or the price per share that would be received if the preferred stock were converted to common stock. If the assets and funds available to be distributed to all holders of preferred stock are insufficient to permit the payment, in full, of any of the liquidation preferences, then the entire assets and funds legally available for distribution to holders of the preferred stock shall be distributed ratably among the holders of preferred stock, acting as a single class, at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

After the payment of the full liquidation preference of the preferred stock as set forth above, the remaining assets of the Company legally available for distribution in such liquidation event shall be distributed ratably to the holders of shares of common stock.

*Redemption*

The preferred stock is not redeemable at the option of the holder thereof except for in the event of a Liquidation Event if the corporation does not effect a dissolution under the general corporation law within 90 days after such Liquidation Event.

**7. Common Stock**

As of December 31, 2021 and June 30, 2022, the Company's Amended and Restated Certificate of Incorporation authorized the Company to issue 72,731,000 shares of common stock, with a par value of $0.0001.

The voting, dividend and liquidation rights of the holders of the Company's common stock are subject to and qualified by the rights, preferences and privileges of the holders of the preferred stock as set forth above.

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 shall not be entitled to vote on any amendment to the Amended and Restated Certificate of Incorporation. There are not any cumulative voting rights. The number of authorized shares of common stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the shares of capital stock of the Company; however, the issuance of common stock may be subject to the vote of the holders of one or more series of preferred stock that may be required by terms of the Amended and Restated Certificate of Incorporation.

As of December 31, 2021 and June 30, 2022, the Company has reserved the following shares of common stock for the potential conversion of outstanding preferred stock, the exercise of stock options, and the vesting of restricted common stock:

| | December 31, 2021 | June 30, 2022 |
|---|---|---|
| Preferred stock, as converted | 21,697,316 | 21,967,316 |
| Options to purchase common stock | 394,254 | 1,803,079 |
| Unvested restricted common stock | 1,907,102 | 1,410,565 |
| Remaining shares reserved for future issuance | 2,065,764 | 656,940 |
| Total | 26,334,436 | 25,837,900 |

**8. Stock-Based Compensation**

***2019 Stock Incentive Plan***

The Company adopted the 2019 Stock Incentive Plan (the "2019 Plan") in July 2019 pursuant to which the Company can issue incentive stock options, stock appreciation rights, restricted stock, restricted stock units, and other stock-based awards. The 2019 Plan is administered by the Board or, at the discretion of the Board, by a committee delegated by Board. The exercise prices, vesting and other restrictions are determined at the discretion of the Board, or its committee if so delegated, except that the exercise price per share of stock options may not be less than 100% of the fair market value of the share of common stock on the date of grant and the term of stock option may not be greater than ten years. The Company's Board values the Company's common stock, taking into consideration its most recently available valuation of common stock performed by third party valuation specialists as well as additional factors which may have changed since the date of the most recent contemporaneous valuation through the date of grant. The 2019 Plan was subsequently amended on various dates

throughout 2020 and 2021, with each amendment increasing the number of awards issuable under the plan. As of June 30, 2022, there were 5,063,021 shares of common stock that were issuable under the 2019 Plan, of which there were 1,803,079 stock options granted and 2,603,003 restricted stock granted. As of June 30, 2022, 656,940 shares of common stock remained available for future grant under the 2019 Plan.

Shares that are expired, terminated, surrendered or canceled under the 2019 Plan without having been fully exercised will be available for future awards.

***Stock Options***

The Company has granted stock options with both service-based and performance-based vesting conditions. Stock options typically vest over four years and have a maximum term of ten years. The Company typically grants stock options to employees and non-employees at exercise prices deemed by the Board to be equal to the fair value of the common stock at the time of grant. For accounting purposes, a retrospective fair value assessment of the common stock was performed to determine the fair value of the Company's common stock and to calculate stock-based compensation expense. These reassessed values were based, in part, upon third-party valuations of the Company's common stock prepared as of each grant date on a retrospective basis. The third-party valuations were prepared using the hybrid method and used market approaches to determine the Company's enterprise value.

The Company utilized the Black-Scholes option-pricing model to estimate the fair value of stock options awarded to employees. The Black-Scholes option-pricing model requires several key assumptions. The key assumptions used to apply this pricing model during the six months ended June 30, 2021 and 2022 were as follows:

| | Six Months Ended June 30, 2021 | Six Months Ended June 30, 2022 |
|---|---|---|
| Expected term (in years) | 6.06 | 5.71-6.53 |
| Expected volatility | 84.2% | 81.9-82.7% |
| Risk-free interest rate | 1.2% | 1.7-2.56% |
| Expected dividend yield | — | — |
| Fair value of common stock | $ 1.90 | $ 8.61 |

The following table summarizes the Company's stock option activity under the 2019 Plan:

| | Number of Shares | Weighted-Average Exercise Price | Weighted-Average Remaining Contractual Term (in years) | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|---|
| Outstanding as of December 31, 2021 | 394,254 | $ 0.85 | 9.08 | $ 3,297 |
| Granted | 1,594,934 | 9.22 | | |
| Exercised | — | — | | |
| Forfeited or cancelled | (186,109) | 8.15 | | |
| Outstanding as of June 30, 2022 | 1,803,079 | $ 7.50 | 9.74 | $ 2,870 |
| Options vested and exercisable as of June 30, 2022 | 173,061 | $ 4.30 | 9.10 | $ 822 |
| Options unvested as of June 30, 2022 | 1,630,018 | $ 7.89 | 9.25 | $ 2,235 |

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock.

The weighted-average grant-date fair value per share of stock options granted during the six months ended June 30, 2022 was $6.61. As of June 30, 2022, there was $9.1 million of unrecognized stock-based compensation expense related to unvested stock options, to be recognized over a weighted-average period of 0.37 years.

The total fair value of options vested during the six months ended June 30, 2022 was $0.6 million.

Included within the total stock options outstanding are 116,186 stock options to purchase common stock which have performance-based vesting criteria and were granted to certain employees, officers and consultants of the Company on various dates during the years ended December 31, 2020 and 2021 (collectively, the "Performance Stock Options"). Vesting of 37,133 of the Performance Stock Options was contingent on the closing of the Series A-2 Second Tranche, which occurred on February 24, 2021, and vesting of the remaining 97,938 Performance Stock Options was contingent on the closing of the Series A-3 Second Tranche, which occurred on November 15, 2021. The vesting commencement date of the Performance Stock Options was the date in which the performance condition is met, and vesting occurs based on the accelerated attribution method over four years from the vesting commencement date. The Company began to recognize expense associated with the Performance Stock Options on the date in which each respective performance criteria was met and recognized total stock-based compensation expense associated with the Performance Stock Options of $58 thousand for the six months ended June 30, 2022. No expense associated with the Performance Stock Options was recognized prior to the year ended December 31, 2021.

***Restricted Common Stock Awards***

The Company has granted restricted common stock awards with service and performance and service based vesting conditions to employees of the Company. Unvested shares of restricted common stock may not be sold or transferred by the holder, except for transfers for estate planning purposes in which the transferee agrees to remain bound by all restrictions set forth in the original common stock purchase agreement. These restrictions lapse over the vesting term of each award, which is typically four years. The purchase price of each share of restricted common stock was $0.0001 per share.

On August 9, 2021, the Company's chief executive office ("CEO") purchased 1,218,836 shares of common stock at a purchase price of $1.44 per share, under the terms of a restricted common stock award granted under the 2019 Plan. These shares were purchased in exchange for a promissory note (the "Promissory Note") of $1.8 million. The shares granted include both service and performance-based vesting criteria. Of the shares granted, (i) 269,044 shares are to vest upon the completion of one year of service measured from August 9, 2021 (the "Vesting Commencement Date"); (ii) 807,134 shares are to vest in a series of successive equal quarterly installments of 6.25% upon the CEO's completion of each additional quarter of service over a three year period from the first anniversary of the Vesting Commencement Date; and (iii) 142,658 shares (the "Performance Shares") are subject to vesting upon the occurrence of the Series A-3 Second Tranche closing, which occurred on November 15, 2021. Upon the occurrence of the Series A-3 Second Tranche closing, 35,664 of the Performance Shares vest on the first anniversary of the Vesting Commencement Date, and the remaining 106,994 Performance Shares vest in a series of successive equal quarterly installments of 6.25% upon the CEO's completion of each additional quarter of service over a three year period from the first anniversary of the Vesting Commencement Date. The Company may purchase all of the unvested shares following the employee's termination at the original purchase price. As of June 30, 2022, none of the shares granted have vested.

The Promissory Note accrues interest at a rate of 0.76% per annum, compounded annually, and are repayable at the earlier of (i) the seventh anniversary from the date of the Promissory Note; (ii) ninety days after termination of the CEO's service to the Company; or (iii) a change in control of the Company. Further, the principal and accrued but unpaid interest of the Promissory Note is to be repaid prior to the Company becoming an issuer within the meaning of the Sarbanes-Oxley Act of 2022. The Promissory Note is collateralized by a pledge of certain assets of the employee, and is a partial recourse note. The Company has accounted for the Promissory Note as non-recourse in its entirety as the recourse and non-recourse portion of the Promissory Note are not directly aligned with a corresponding percentage of the underlying shares. The non-recourse notes

received by the Company as consideration for the issuance of the restricted stock has been considered a stock option for accounting purposes as the substance is similar to the grant of an option until the note is settled. The fair value of the restricted stock granted to the CEO in exchange for the Promissory Note is estimated on the grant date using the Black-Scholes option pricing model. The exercise price is the principal due on the Promissory Note. The fair value of the award is recognized over the requisite service period (not the term of the Promissory Note) through a charge to compensation cost.

A summary of the activity of the restricted common stock under the 2019 Plan was as follows:

| | Number of Shares | Weighted-Average Grant Date Fair Value Per Share |
|---|---|---|
| Unvested at December 31, 2021 | 1,907,102 | $ 1.17 |
| Granted | — | — |
| Vested | (178,764) | 0.85 |
| Cancelled or forfeited | (317,773) | 0.71 |
| Unvested at June 30, 2022 | 1,410,565 | $ 1.06 |

The weighted-average grant-date fair value per share of restricted common stock awards granted during the six months ended June 30, 2022 was zero as no shares were granted in the period. The aggregate fair value of restricted stock awards that vested during the six months ended June 30, 2022 was $0.1 million. Stock-based compensation expense recognized for the restricted stock granted was $0.7 million for the six months ended June 30, 2022. As of June 30, 2022, there was unrecognized expense of $1.6 million related to the restricted stock, which is expected to be recognized over a weighted-average period of 0.21 years.

***Stock-Based Compensation Expense***

Stock-based compensation expense included in the Company's condensed consolidated statements of operations was as follows (in thousands):

| | Six Months Ended June 30, | |
|---|---|---|
| | 2021 | 2022 |
| Research and development | $ 87 | $ 381 |
| General and administrative | 51 | 1,228 |
| Total stock-based compensation expense | $138 | $ 1,609 |

**9. Income Taxes**

During the three and six months ended June 30, 2022 and 2021, the Company recorded no income tax provision or benefit.

The Company has evaluated the positive and negative evidence bearing upon its ability to realize its deferred tax assets, which primarily consist of net operating loss carryforwards. The Company has considered its history of cumulative net losses, estimated future taxable income and prudent and feasible tax planning strategies and has concluded that it is more likely than not that the Company will not realize the benefits of its deferred tax assets. As a result, as of June 30, 2022, the Company has maintained a full valuation allowance against its remaining net deferred tax assets.

**10. Net Loss Per Share**

The following table sets forth the computation of the Company's basic and diluted net loss per share for the periods presented (in thousands, except share and per share amounts):

| | Six Months Ended June 30, | |
|---|---|---|
| | 2021 | 2022 |
| Numerator: | | |
| Net loss | $ 6,446 | $ 15,460 |
| Net loss attributable to common stockholders, basic and diluted | $ 6,446 | $ 15,460 |
| Denominator: | | |
| Weighted-average number of common shares used in net loss per share, basic and diluted | 3,939,670 | 4,321,267 |
| Net loss per share of common stock, basic and diluted | $ 1.64 | $ 3.58 |

The Company excluded the following shares from the computation of diluted net loss per share attributable to common stockholders as of June 30, 2021 and 2022 because including them would have had an anti-dilutive effect:

| | June 30, | |
|---|---|---|
| | 2021 | 2022 |
| Redeemable convertible preferred stock | 13,135,509 | 21,967,316 |
| Options to purchase common stock | 436,298 | 1,803,079 |
| Unvested restricted stock | 856,310 | 1,410,565 |
| Total | 14,428,117 | 25,180,960 |

**11. Commitments and Contingencies**

***Legal Proceedings***

From time to time, in the ordinary course of business, the Company is subject to litigation and regulatory examinations as well as information gathering requests, inquiries and investigations. As of December 31, 2021 and June 30, 2022, there were no litigation matters which would have a material impact on the Company's financial results.

***Leases***

The Company's operating leases are comprised of month-to-month office space leases entered into with Atlas for various office suites located at 400 Technology Square in Cambridge, Massachusetts, with the Company acting as a subtenant. Given the short-term nature of the leases, and as the Company has elected to not recognize leases with a lease term of 12 months or less on the balance sheet, no operating lease ROU asset and liability has been recognized as of December 31, 2021 and June 30, 2022. The Company incurred $31 thousand and $39 thousand of expenses during the six months ended June 30, 2021 and 2022, respectively.

**12. Related Party Transactions**

***Atlas***

Atlas is a significant beneficial owner of the Company, holding more than 5% of the total outstanding stock of the Company, as of December 31, 2021 and June 30, 2022. The Company leases various office spaces from Atlas for use in its daily operations.

During each of the six months ended June 30, 2021 and 2022 the Company made payments of $31 thousand and $39 thousand, respectively associated with the lease agreements with Atlas, which was recorded within the general and administrative expense.

***Novartis***

Novartis is a significant beneficial owner of the Company, holding more than 5% of the total outstanding stock of the Company, as of December 31, 2021 and June 30, 2022. The Company has an in-license agreement with Novartis, which required the Company to make an upfront payment and issue shares of Series A-1 Preferred Stock to Novartis, and further includes future milestone payments upon the occurrence of certain events and royalty payments upon future sales. Refer to Note 5.

***CEO Promissory Note***

On August 9, 2021, the Company entered into the Promissory Note with the CEO for an amount of $1.8 million, which was used to allow the CEO to purchase 1,218,836 shares of common stock granted in the form of a restricted stock award under the 2019 Plan. The Promissory Note has a stated interest rate of 0.76%, which is compounded annually, and matures upon the earlier of (i) the seventh anniversary from the date of the Promissory Note; (ii) ninety days after termination of the CEO's service to the Company; or (iii) a change in control of the Company. Further, the principal and accrued but unpaid interest of the Promissory Note is to be repaid prior to the Company becoming an issuer within the meaning of the Sarbanes-Oxley Act of 2022. As of June 30, 2022, the entire amount of the Promissory Note remained outstanding. See Note 8.

***Consulting Agreements***

In June 2019, the Company entered into a consulting agreement with Mark Iwicki, the chairman of the Board, for consulting services. Pursuant to this agreement, Mr. Iwicki was granted a restricted stock award for 47,100 shares of the Company's common stock, with 1/48th of the shares subject to the award vesting in equal monthly installments. The Company recognized stock-based compensation of $4 thousand and $4 thousand, respectively, for the six months ended June 30, 2021 and 2022 associated with the agreement which was recorded within general and administrative expense.

In July 2019, the Company entered into a consulting agreement with H. Martin Seidel, in connection with his appointment to the Board and the Company's scientific advisory board, for consulting services. The Company will make payments of $25,000 per year for such consulting services, payable quarterly in arrears. In addition, Dr. Seidel was granted a restricted stock award of 75,360 shares of the Company's common stock, with 25% of the shares subject to the award vesting on July 25, 2020 and the remaining shares vesting in equal quarterly installments thereafter until July 25, 2023. The Company recognized stock-based compensation of $6 thousand and $6 thousand, respectively, for the six months ended June 30, 2021 and 2022 associated with the agreement which was recorded within general and administrative expense.

**13. Employee Benefit Plans**

Effective January 1, 2019, the Company adopted a 401(k) Plan for its employees, which is designed to be qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted to contribute to the 401(k) Plan within statutory and 401(k) Plan limits. Since inception of the plan and through the six months ended June 30, 2022, the Company has not made any contributions to the 401(k) Plan.

**14. Subsequent Events**

On July 28, 2022, the Company amended the 2019 Stock Incentive Plan to increase the number of available awards issuable by 254,537 shares of common stock (the "Plan Increase"). As a result, the total number of shares issuable under the 2019 Plan is 5,317,559 shares of common stock. The Plan Increase was adopted by the majority of the securityholders of the Company's outstanding Preferred Stock on August 9, 2022.

On August 22, 2022, the Promissory Note (as defined within Note 8) provided by the CEO, including principal of $1.8 million and accrued and unpaid interest, was forgiven. The Company will account for the forgiveness of the Promissory Note as a modification to the original restricted stock award during the third quarter of 2022. The impact to the modification may be material to the stock-based compensation recorded within the financial statements.

The Company's Board approved a one-for-2.259 reverse stock split of its issued and outstanding common stock and stock options effective as of September 7, 2022. Accordingly, all share and per share amounts for all periods presented in the accompanying financial statements and notes thereto have been retroactively adjusted, where applicable, to reflect the reverse stock split.

*Shares*


*Common Stock*

# *PROSPECTUS*

***MORGAN STANLEY*** ***JEFFERIES*** ***COWEN***

*LIFESCI CAPITAL*

*Until , 2022, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.*

*, 2022*

## PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, paid or payable by the Registrant in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the Nasdaq listing fee:

| | Amount Paid or to Be Paid |
|---|---|
| SEC registration fee | $ 17,270 |
| FINRA filing fee | 28,455 |
| The Nasdaq Global Market listing fee | 170,000 |
| Printing and engraving expenses | 275,000 |
| Legal fees and expenses | 1,700,000 |
| Accounting fees and expenses* | 978,000 |
| Transfer agent and registrar fees and expenses | 10,000 |
| Miscellaneous expenses | 121,275 |
| Total | $ 3,300,000 |

* Certain accounting fees have been expensed by the Company

### 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 under certain circumstances and subject to certain limitations. The terms of Section 145 of the DGCL are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

As permitted by the DGCL, the registrant's restated certificate of incorporation to be effective in connection with the completion of this offering contains provisions that eliminate the personal liability of its directors and officers for monetary damages for any breach of fiduciary duties in their role, except liability for the following:

- any breach of the director's duty of loyalty to the registrant or its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under Section 174 of the DGCL (regarding unlawful dividends and stock purchases); or
- any transaction from which the director derived an improper personal benefit.

As permitted by the DGCL, the registrant's restated bylaws to be effective in connection with the completion of this offering, provide that:

- the registrant is required to indemnify its directors and executive officers to the fullest extent permitted by the DGCL, subject to limited exceptions;
- the registrant may indemnify its other employees and agents as set forth in the DGCL;

- the registrant is required to advance expenses, as incurred, to its directors and executive officers in connection with a legal proceeding to the fullest extent permitted by the DGCL, subject to limited exceptions; and

- the rights conferred in the restated bylaws are not exclusive.

Prior to the completion of this offering, the registrant intends to enter into indemnification agreements with each of its current directors and executive officers to provide these directors and executive officers additional contractual assurances regarding the scope of the indemnification set forth in the registrant's restated certificate of incorporation and restated bylaws and to provide additional procedural protections. There is no pending litigation or proceeding involving a director or executive officer of the registrant for which indemnification is sought. Reference is also made to the underwriting agreement to be filed as Exhibit 1.1 to this registration statement, which provides for the indemnification of executive officers, directors and controlling persons of the registrant against certain liabilities. The indemnification provisions in the registrant's restated certificate of incorporation, restated bylaws and the indemnification agreements entered into or to be entered into between the registrant and each of its directors and executive officers may be sufficiently broad to permit indemnification of the registrant's directors and executive officers for liabilities arising under the Securities Act.

The registrant has directors' and officers' liability insurance for securities matters.

**ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.**

The following lists set forth information regarding all securities sold or granted by the registrant from September 8, 2019 through the date of this prospectus that were not registered under the Securities Act, and the consideration, if any, received by the registrant for such securities:

***(a) Equity Grants***

*Stock Option Grants*. From September 8, 2019 and through the date of this prospectus, the registrant has granted to its employees, directors, consultants and other service providers options to purchase an aggregate of 2,556,218 shares of our common stock under the 2019 Plan, with exercise prices ranging from $0.45 to $9.22 per share. The issuances of the securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act or Rule 701 promulgated under the Securities Act as transactions pursuant to compensatory benefit plans. The shares of our common stock issued upon the exercise of options are deemed to be restricted securities for purposes of the Securities Act.

***(b) Common Stock***

From September 8, 2019 and through date of this prospectus, we issued an aggregate of 2,445,652 shares of restricted common stock, for cash with a purchase price of $0.02 to $1.45 per share, pursuant to restricted stock purchase agreements and, or for services rendered, to our employees, directors, advisors and consultants pursuant to our 2019 Plan.

The issuances of shares of common stock described in this section (b) of Item 15 were issued pursuant to either (i) restricted stock purchase agreements, pursuant to Section 4(a)(2) under the Securities Act or (ii) written compensatory plans or arrangements with our employees, directors, advisors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act or pursuant to Section 4(a)(2) under the Securities Act. All recipients either received adequate information about our company or had access, through employment or other relationships, to such information.

***(c) Preferred Stock***

We issued 5,970,000 shares of our Series A-1 Preferred Stock to Novartis between July 2019 and February 2021 pursuant to the Novartis Investment Letter. Each share of our Series A-1 Preferred Stock will automatically

convert into 6,184,150 shares of our common stock immediately prior to the completion of this offering. Pursuant to our IRA holders of our Series A-1 Preferred Stock are entitled to certain registration rights. These transactions were exempt from the registration requirements of the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated under the Securities Act.

From July 2020 through February 2021, we sold an aggregate of 13,750,000 shares of our Series A-2 Preferred Stock, at a purchase price of $1.60 per share for total gross proceeds of $22.0 million. Each share of our Series A-2 Preferred Stock will automatically convert into 6,086,762 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series A-2 Preferred Stock are entitled to certain registration rights. These transactions were exempt from the registration requirements of the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated under the Securities Act.

From February 2021 through November 2021, we sold an aggregate of 7,812,501 shares of our Series A-3 Preferred Stock, at a purchase price of $2.56 per share for total gross proceeds of $20.0 million. Each share of our Series A-3 Preferred Stock will automatically convert into 3,458,386 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series A-3 Preferred Stock are entitled to certain registration rights. These transactions were exempt from the registration requirements of the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated under the Securities Act.

In December 2021, we sold an aggregate of 14,091,686 shares of our Series B Preferred Stock, at a purchase price of $7.4512 per share for total gross proceeds of approximately $105.0 million. Each share of our Series B Preferred Stock will automatically convert into 6,238,018 shares of our common stock immediately prior to the completion of this offering. Pursuant to the IRA, holders of our Series B Preferred Stock are entitled to certain registration rights. These transactions were exempt from the registration requirements of the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated under the Securities Act.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions or any public offering, and the registrant believes each transaction was exempt from the registration requirements of the Securities Act as stated above. All recipients of the foregoing transactions either received adequate information about the registrant or had access, through their relationships with the registrant, to such information. Furthermore, the registrant affixed appropriate legends to the share certificates and instruments issued in each foregoing transaction setting forth that the securities had not been registered and the applicable restrictions on transfer.

## ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

***(a) Exhibits.***

| Exhibit Number | Description of Document |
|---|---|
| 1.1 | Form of Underwriting Agreement. |
| 3.1 | Amended and Restated Certificate of Incorporation, as amended, as currently in effect. |
| 3.2* | Form of Restated Certificate of Incorporation to be effective upon the completion of this offering. |
| 3.3* | Bylaws, as currently in effect. |
| 3.4* | Form of Restated Bylaws to be effective upon the completion of this offering. |
| 4.1 | Form of Common Stock Certificate. |
| 4.2* | Amended and Restated Investors' Rights Agreement, dated December 17, 2021 by and among the Registrant and certain of its stockholders. |
| 5.1 | Opinion of Fenwick & West LLP. |
| 10.1 | Form of Indemnity Agreement. |
| 10.2* | 2019 Stock Incentive Plan, as amended, and forms of award agreements. |
| 10.3 | 2022 Equity Incentive Plan, to become effective on the date the registration statement is declared effective, and forms of award agreements. |
| 10.4 | 2022 Employee Stock Purchase Plan, to become effective on the date the registration statement is declared effective, and forms of award agreements. |
| 10.5^* | Use and Occupancy Agreement, dated February 1, 2021, by and among the Registrant and Atlas Venture Life Science Advisors, LLC. |
| 10.6^* | Use and Occupancy Agreement, dated July 1, 2021, by and between the Registrant and Atlas Venture Life Science Advisors, LLC. |
| 10.7†^* | License Agreement, dated June 28, 2019, by and between the Registrant and Novartis International Pharmaceutical Ltd. |
| 10.8* | Offer Letter, dated July 2, 2021, by and between the Registrant and Natalie Holles. |
| 10.9 | Amended and Restated Employment Agreement, dated August 22, 2022, by and between the Registrant and Natalie Holles. |
| 10.10 | Form of Change in Control and Severance Agreement. |
| 10.11* | Consulting Agreement, dated June 14, 2019, by and between the Registrant and Mark Iwicki. |
| 10.12* | Consulting and Scientific Advisory Board Agreement, dated July 25, 2019, by and between the Registrant and H. Martin Seidel. |
| 21.1* | Subsidiaries of the Registrant. |
| 23.1 | Consent of Deloitte & Touche LLP. |
| 23.2 | Consent of Fenwick & West LLP (included in Exhibit 5.1). |
| 24.1* | Power of Attorney. |
| 107 | Calculation of Filing Fee Tables. |

* Previously filed
† The Registrant has omitted portions of the exhibit as permitted under Item 601(b)(10) of Regulation S-K.
^ The Registrant has omitted schedules and exhibits pursuant to Item 601(b)(2) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of the omitted schedules and exhibits to the SEC upon request.

***(b) Financial Statement Schedules.***

No financial statement schedules are provided because the information called for is not required or is shown either in the consolidated financial statements or notes.

**ITEM 17. UNDERTAKINGS.**

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(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 upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the 8th day of September, 2022.

**THIRD HARMONIC BIO, INC.**

By: */s/ Natalie Holles*
Natalie Holles
*Chief Executive Officer*

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|---|---|---|
| */s/ Natalie Holles*<br>Natalie Holles | Chief Executive Officer and Director<br>*(Principal Executive Officer)* | September 8, 2022 |
| */s/ Robert Ho*<br>Robert Ho | Chief Financial Officer<br>*(Principal Accounting and Financial Officer)* | September 8, 2022 |
| *<br>Mark Iwicki | Chairman and Director | September 8, 2022 |
| *<br>David P. Bonita, M.D. | Director | September 8, 2022 |
| *<br>Michael Gladstone | Director | September 8, 2022 |
| *<br>Shao-Lee Lin, M.D., Ph.D. | Director | September 8, 2022 |
| *<br>Rob Perez | Director | September 8, 2022 |
| *<br>Jason Rhodes | Director | September 8, 2022 |
| *<br>H. Martin Seidel, Ph.D. | Director | September 8, 2022 |
| *<br>Thomas M. Soloway | Director | September 8, 2022 |

*By: Attorney-in-Fact

*/s/ Natalie Holles* September 8, 2022
Natalie Holles

**Exhibit 1.1**

**[•] Shares**

**THIRD HARMONIC BIO, INC.**
**COMMON STOCK, PAR VALUE $0.0001 PER SHARE**

**UNDERWRITING AGREEMENT**

[•], 2022

Morgan Stanley & Co. LLC
Jefferies LLC
Cowen and Company, LLC

c/o Morgan Stanley & Co. LLC
1585 Broadway
New York, NY 10036

c/o Jefferies LLC
520 Madison Avenue
New York, NY 10022

c/o Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

Ladies and Gentlemen:

Third Harmonic Bio, Inc., a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the "**Underwriters**"), for whom Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC are acting as representatives (the "**Representatives**"), [•] shares of its common stock, par value $0.0001 per share (the "**Firm Shares**"). The Company also proposes to issue and sell to the several Underwriters not more than an additional [•] shares of its common stock, par value $0.0001 per share (the "**Additional Shares**"), if and to the extent that the Representatives shall have determined to exercise, on behalf of the Underwriters, the right to purchase such shares of common stock granted to the Underwriters in Section 2 hereof. The Firm Shares and the Additional Shares are hereinafter collectively referred to as the "**Shares**." The shares of common stock, par value $0.0001 per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the "**Common Stock**."

The Company has filed with the Securities and Exchange Commission (the "**Commission**") a registration statement on Form S-1 (File No. 333-267022), including a preliminary prospectus, relating to the Shares. The registration statement as amended at the time it becomes effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the "**Securities Act**"), is hereinafter referred to as the "**Registration Statement**"; the prospectus in the form first used to confirm sales of Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the "**Prospectus**." If the Company has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) under the Securities Act (a "**Rule 462 Registration Statement**"), then any reference herein to the term "**Registration Statement**" shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Agreement, "**free writing prospectus**" has the meaning set forth in Rule 405 under the Securities Act, "**preliminary prospectus**" shall mean each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted information pursuant to Rule 430A under the Securities Act that was used after such effectiveness and prior to the execution and delivery of this Agreement, "**Time of Sale Prospectus**" means the preliminary prospectus contained in the Registration Statement at the time of its effectiveness together with the documents and pricing information set forth in Schedule II hereto, and "**broadly available road show**" means a "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms "Registration Statement," "preliminary prospectus," "Time of Sale Prospectus" and "Prospectus" shall include the documents, if any, incorporated by reference therein as of the date hereof.

1. *Representations and Warranties*. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose or pursuant to Section 8A under the Securities Act are pending before or, to the Company's knowledge, threatened by the Commission.

(b) (i) The Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (iii) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, as of the date of such amendment or supplement, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iv) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to

make the statements therein, in the light of the circumstances under which they were made, not misleading and (v) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein, it being understood and agreed upon that the only such information furnished by any Underwriter consists of the Underwriting Information (as defined below).

(c) The Company is not an "ineligible issuer" in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply, as of the date of such filing, in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule II hereto, and electronic road shows, if any, each furnished to the Representatives before first use, the Company has not prepared, used or referred to, and will not, without the prior consent of the Representatives, prepare, use or refer to, any free writing prospectus.

(d) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the State of Delaware, has the corporate power and authority to own or lease its property and to conduct its business as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not, individually or in the aggregate, reasonably be expected to have a material adverse effect (as such term is defined below) on the Company and its subsidiaries, taken as a whole.

(e) Each subsidiary of the Company has been duly incorporated, organized or formed, is validly existing as a corporation or other business entity in good standing under the laws of the jurisdiction of its incorporation, organization or formation, has the corporate or other business entity power and authority to own or lease its property and to conduct its business as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in

which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole; all of the issued shares of capital stock or other equity interests of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims.

(f) This Agreement has been duly authorized, executed and delivered by the Company.

(g) The authorized capital stock of the Company conforms in all material respects as to legal matters to the description thereof contained in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(h) The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable.

(i) The Shares have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of the Shares will not be subject to any preemptive or similar rights that have not been validly waived.

(j) With respect to the stock options granted pursuant to the stock-based compensation plans of the Company and its subsidiaries (the "**Company Stock Plan**"), (i) each grant of a stock option was duly authorized no later than the date on which the grant of such stock option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, and (ii) each such grant was made in accordance with the terms of the Company Stock Plan, Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), any other applicable federal laws, and the rules of the Nasdaq Global Market ("**Nasdaq**") and any other exchange on which the Company's securities are traded.

(k) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene (i) any provision of applicable law, (ii) the certificate of incorporation or by-laws of the Company, (iii) any agreement or other instrument binding upon the Company or any of its subsidiaries that is material to the Company and its subsidiaries, taken as a whole, or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, except in the case of clauses (i), (iii) and (iv), that would not,

individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, and no consent, approval, authorization or order of, or qualification with, any governmental body, agency or court is required for the performance by the Company of its obligations under this Agreement, except such as have been obtained or waived or as may be required by the securities or Blue Sky laws of the various states or the rules and regulations of the Financial Industry Regulatory Authority ("**FINRA**") or Nasdaq in connection with the offer and sale of the Shares.

(l) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company (a "**material adverse effect**") and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus.

(m) Neither the Company nor any of its subsidiaries is (i) in violation of its respective certificate of incorporation or bylaws; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or other condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority applicable to the Company, any of its subsidiaries or their respective businesses and properties, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(n) There are no legal or governmental proceedings pending or, to the Company's knowledge, threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (i) other than proceedings accurately described in all material respects in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and proceedings that would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by each of the Registration Statement, the Time of Sale Prospectus and the Prospectus or (ii) that are required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus and are not so described in all material respects; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus or to be filed as exhibits to the Registration Statement that are not described in all material respects or filed as required.

(o) Each preliminary prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder.

(p) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(q) The Company and each of its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(r) There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(s) There are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement, except those contracts, agreements and understandings described in the Time of Sale Prospectus and the Prospectus, all of which have been validly waived or complied with in connection with the issuance and sale of the Shares contemplated hereby.

(t) (i) None of the Company or any of its subsidiaries, or any director or officer thereof, or, to the Company's knowledge, any affiliate, agent, employee or representative of the Company or of any of its subsidiaries or affiliates, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) ("**Government Official**") in order to obtain, retain, or direct business or influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) the Company and each of its subsidiaries and affiliates have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) neither the Company nor any of its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

(u) The operations of the Company and each of its subsidiaries are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company and each of its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental or regulatory agency (collectively, the "**Anti-Money Laundering Laws**"), and no action, suit or proceeding by or before any court or governmental or regulatory agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(v) (i) None of the Company, any of its subsidiaries, or any director, officer, or employee thereof, or, to the Company's knowledge, any agent, affiliate or representative of the Company or any of its subsidiaries, is an individual or entity ("**Person**") that is, or is owned or controlled by one or more Persons that are:

(A) the subject of any sanctions administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority (collectively, "**Sanctions**"), or

(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Crimea, Cuba, Iran, North Korea, Syria, and the Donetsk People's Republic and Luhansk People's Republic located in Ukraine).

(ii) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) The Company and each of its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not knowingly engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(w) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries, taken as a whole, have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company and its subsidiaries, taken as a whole (other than the exercise, grant or forfeiture of any equity awards, in each case granted pursuant to any equity compensation plan described in the Time of Sale Prospectus).

(x) Neither the Company nor any of its subsidiaries own any real property. The Company has good and marketable title to all personal property owned by it which is material to the business of the Company and its subsidiaries, in each case free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and

its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and to the Company's knowledge enforceable leases with such exceptions as are not material and would not reasonably be expected to materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries.

(y) The Company and its subsidiaries own or have valid, binding and enforceable licenses or other rights to practice and use all technology, patents and patent applications, copyrights, trademarks, trademark registrations, service marks, service mark registrations, trade names, service names and know-how described in the Registration Statement, the Time of Sale Prospectus and the Prospectus as being owned or licensed by them or which are necessary for, or used in the conduct, or the proposed conduct, of the business of the Company and its subsidiaries (collectively, the "**Company Intellectual Property**"). To the Company's knowledge, the conduct of the Company's and its subsidiaries' respective business and the proposed conduct of its business (including the development and commercialization of the product candidates described in the Time of Sale Prospectus and the Prospectus) has not and will not infringe or misappropriate in any material respect any intellectual property rights of others, there are no rights of third parties to any of the intellectual property owned by the Company or any of its subsidiaries, and such intellectual property is owned by the Company or its subsidiary free and clear of all liens, security interests, or encumbrances. To the Company's knowledge, the patents, trademarks and copyrights held or licensed by the Company and its subsidiaries included within the Company Intellectual Property are valid, enforceable and subsisting, and the patent, trademark, and copyright applications included within the Company Intellectual Property are subsisting and have not been abandoned; and there is no infringement by third parties of any of the Company Intellectual Property. Except as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries are not obligated or under any liability to pay a royalty, grant a license, or provide other material consideration to any third party in connection with the Company Intellectual Property, (ii) no action, suit, claim or other proceeding is pending or, is threatened, alleging that the Company or any of its subsidiaries is infringing, misappropriating, diluting or otherwise violating, or would to the Company's knowledge, upon the commercialization of any product or service proposed in the Time of Sale Prospectus and the Prospectus to be conducted, infringe, misappropriate, dilute, or otherwise violate any rights of others with respect to any of the Company's product candidates, processes or intellectual property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim, (iii) no action, suit, claim or other proceeding is pending or, is threatened, challenging the validity, enforceability, scope, registration, ownership or use of any of the Company Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim, (iv) no action, suit, claim or other proceeding is pending or, is threatened, challenging the Company's rights in or to

any Company Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim, (v) the Company has not received notice of any claim of infringement, misappropriation or conflict with any asserted rights of others with respect to any of the Company's products, proposed products, processes or Company Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim, (vi) to the Company's knowledge, the development, manufacture, sale, and any currently proposed use of any of the products, proposed products or processes of the Company referred to in the Time of Sale Prospectus and the Prospectus, in the current or proposed conduct of the business of the Company, do not infringe any right or valid patent claim of any third party, (vii) to the Company's knowledge, no employee, consultant or independent contractor of the Company or any of its subsidiaries ("**Company Personnel**") is in or has ever been in any material violation in any respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement nondisclosure agreement or any restrictive covenant to or with a former employer or counterparty to such agreements, where the basis of such violation relates to such Company Personnel's employment or independent contractor's engagement with the Company or any of its subsidiaries, actions undertaken while employed or engaged with the Company or any of its subsidiaries, or the ownership by the Company of any Company Intellectual Property, (viii) the Company has taken reasonable measures to protect its confidential information and trade secrets and to maintain and safeguard the Company Intellectual Property, including the execution of appropriate nondisclosure and confidentiality agreements, (ix) to the Company's knowledge, it and its subsidiaries have complied with the terms of each agreement pursuant to which intellectual property has been licensed to the Company or any of its subsidiaries, and all such agreements are in full force and effect, (x) to the Company's knowledge, none of the Company Intellectual Property or technology (including information technology and outsourced arrangements) employed by the Company or its subsidiaries has been obtained or is being used by the Company or its subsidiary in violation of any contractual obligation binding on the Company or its subsidiaries or any of their respective officers, directors or employees or otherwise in violation of the rights of any persons, (xi) the product candidates described in the Time of Sale Prospectus and the Prospectus as under development by the Company fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company, and (xii) the duties of candor and good faith required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Company Intellectual Property have been complied with.

(z) Except as would not, individually or in the aggregate, reasonably be expected to result in a material adverse effect on the Company and its subsidiaries, taken as a whole, (i) each Plan (as defined below) has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**") and the Internal Revenue Code of 1986, as amended (the "**Code**"); (ii) no non-exempt prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan; (iii) for each Plan, no failure to satisfy the minimum funding standards (within the meaning of Section 412 of the Code or Section 302 of ERISA), whether or not waived, has occurred or is reasonably expected to occur; (iv) no "reportable event" (within the meaning of Section 4043(c) of ERISA, other than those events as to which notice is waived) has occurred or is reasonably expected to occur; and (v) neither the Company nor any member of its "Controlled Group" (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Code) has incurred, nor is reasonably expected to incur, any liability under Title IV of ERISA (other than contributions to any Plan or any Multiemployer Plan or premiums to the PBGC, in the ordinary course and without default) in respect of a Plan or a Multiemployer Plan. For purposes of this paragraph, (x) the term "Plan" means an employee benefit plan, within the meaning of Section 3(3) of ERISA, subject to Title IV of ERISA, but excluding any Multiemployer Plan, for which the Company or any member of its "Controlled Group" has any liability and (y) the term "Multiemployer Plan" means a multiemployer plan within the meaning of Section 4001(a)(3) of ERISA.

(aa) No material labor dispute with the employees of the Company or any of its subsidiaries exists, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(bb) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks, except with respect to security breaches or disruptions, and in such amounts as are prudent and customary in the businesses in which they are engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(cc) The Company and each of its subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(dd) The financial statements included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, together with the related schedules and notes thereto, comply as to form in all material respects with the applicable accounting requirements of the Securities Act and present fairly in all material respects the consolidated financial position of the Company and its subsidiaries as of the dates shown and its results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with generally accepted accounting principles in the United States ("**U.S. GAAP**") applied on a consistent basis throughout the periods covered thereby except for any normal year-end adjustments and the exclusion of certain footnotes as permitted by the applicable rules of the Commission in the case of the Company's unaudited interim financial statements. The other financial information included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus has been derived from the accounting records of the Company and its consolidated subsidiaries and presents fairly in all material respects the information shown thereby.

(ee) The statistical, industry-related and market-related data included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus are based on or derived from sources which the Company reasonably and in good faith believes are reliable and accurate and such data is consistent with the sources from which they are derived, in each case in all material respects. To the knowledge of the Company, it does not require the consent of any third party for the use of any such data.

(ff) Deloitte & Touche LLP, which has expressed its opinion and certified certain of the financial statements of the Company and its subsidiaries filed with the Commission as part of the Registration Statement and included in each of the Time of Sale Prospectus and the Prospectus, is an independent registered public accounting firm with respect to the Company and its subsidiaries within the meaning of the Securities Act and the applicable rules and regulations thereunder adopted by the Commission and the Public Company Accounting Oversight Board (United States).

(gg) Except as otherwise disclosed in the Time of Sale Prospectus and Prospectus, the Company and each of its subsidiaries have established and maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as

otherwise disclosed in the Time of Sale Prospectus and Prospectus, since the end of the Company's most recent audited fiscal year, there has been (i) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (ii) no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially adversely affect, the Company's internal control over financial reporting.

(hh) To the extent required under applicable rules, the Company maintains disclosure controls and procedures that have been designed to comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that material information relating to the Company and its subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective to perform the functions for which they were established.

(ii) The Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(jj) The Company and each of its subsidiaries have filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company or any of its subsidiaries which, individually or in the aggregate, has had (nor does the Company nor any of its subsidiaries have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company or its subsidiaries and which would reasonably be expected to have) a material adverse effect on the Company and its subsidiaries, taken as a whole.

(kk) The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance with all provisions of the Sarbanes-Oxley Act of 2002, as amended (the "**Sarbanes-Oxley Act**"), and all rules and regulations promulgated thereunder applicable to the Company at such time, and is taking steps designed to ensure that it will be in compliance, at all times, with the other provisions of the Sarbanes-Oxley Act when they become applicable to the Company after the effectiveness of the Registration Statement.

(ll) The Company has not taken, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(mm) From the time of initial confidential submission of the Registration Statement to the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**").

(nn) The Company (i) has not alone engaged in any Testing-the-Waters Communication with any person other than Testing-the-Waters Communications with the consent of the Representatives with entities that are reasonably believed to be qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are reasonably believed to be accredited investors within the meaning of Rule 501 under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act other than those listed on Schedule III hereto. "**Testing-the-Waters Communication**" means any communication with potential investors undertaken in reliance on Section 5(d) or Rule 163B of the Securities Act.

(oo) As of the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, none of (i) the Time of Sale Prospectus, (ii) any free writing prospectus, when considered together with the Time of Sale Prospectus, and (iii) any individual Testing-the-Waters Communication, when considered together with the Time of Sale Prospectus, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(pp) The preclinical tests and clinical trials, and other studies (collectively, "**Studies**") that are described in, or the results of which are referred to in, the Registration Statement, the Time of Sale Prospectus or the Prospectus were and, if still pending, are being conducted in all material respects in accordance with the protocols, procedures and controls designed and submitted to the relevant regulatory agency; each description of the results of such Studies is accurate and complete in all material respects and fairly presents the data derived from such Studies, and the Company has no knowledge of any other Studies the results of which are inconsistent with, or otherwise call into question, the results described or referred to in the Registration Statement, the Time of Sale Prospectus

or the Prospectus; the Company has made all such filings and obtained all such approvals or authorizations as may be required by the Food and Drug Administration (the "**FDA**") of the U.S. Department of Health and Human Services or from any other U.S. or foreign government or drug regulatory agency, or health care facility Institutional Review Board (collectively, the "**Regulatory Agencies**"), except where the failure to make such filing or obtain such approval would not reasonably be expected to, individually or in the aggregate, result in a material adverse effect on the Company and its subsidiaries, taken as a whole; the Company has not received any written notice of, or correspondence from, any Regulatory Agency requiring the termination, suspension or material modification of any clinical trials that are described or referred to in the Registration Statement, the Time of Sale Prospectus, nor is the Company aware of any reasonable grounds for such notice or correspondence; and the Company has operated and currently is in compliance in all material respects with all applicable laws, rules and regulations of the Regulatory Agencies.

(qq) The Company and its subsidiaries and their respective directors, officers, employees, contractors, and agents are, and at all times have been, in material compliance with all applicable statutes, rules and regulations applicable to the Health Care Laws, as defined below. For purposes of this Agreement, "**Health Care Laws**" means: (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 301 et seq.) and the regulations promulgated thereunder; (ii) all applicable federal, state, local and all applicable foreign health care related fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. §1320a-7b(b)), the U.S. False Statements Law (42 U.S.C. §1320a-7b(a)), the Civil Monetary Penalties Law (42 U.S.C. §1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. §3729 et seq.), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. §§ 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("**HIPAA**") (42 U.S.C. §§ 1320d et seq.), the Physician Payments Sunshine Act (42 U.S.C. §1320-7h), the exclusions law (42 U.S.C. §1320a-7), the statutes, regulations of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes; (iii) the Standards for Privacy of Individually Identifiable Health Information, the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act ("**HITECH Act**") (42 U.S.C. §§ 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or other law or regulation the purpose of which is to protect the privacy of individuals or prescribers; (iv) licensure, quality, safety and accreditation requirements under applicable Regulatory Agencies applicable to the Company's operations; and (v) any and all other applicable health care laws and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, advertising, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company. Neither the Company nor its subsidiaries has received written notice of any claim, action, suit, proceeding,

hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority alleging that any product operation or activity is in material violation of any Health Care Laws, and, to the Company's knowledge, no such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened. Neither the Company, its subsidiaries, nor any of their officers, directors, employees, contractors or agents, is a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company including any of its employees, contractors, agents, officers or directors, nor its subsidiaries including any of the subsidiary's employees, contractors, agents, officers or directors, has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion, or engaged in any conduct that would reasonably be expected to result in debarment, suspension, or exclusion. The Company and its subsidiaries have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by the Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were timely, complete, accurate and not misleading on the date filed in all material respects (or were corrected or supplemented by a subsequent submission). The Company and its subsidiaries possess and are in material compliance with all licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Health Care Laws. The Company and its subsidiaries have fulfilled and performed all of their respective obligations with respect to all licenses, sublicenses, certificates, permits and other authorizations and no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other impairment of the rights of the holder.

(rr) The Company: (i) is and at all times has been in material compliance with all statutes, rules or regulations of the FDA and other comparable governmental entities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution storage, import, export or disposal of any product under development, manufactured or distributed by the Company ("**Applicable Laws**"); (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from the FDA or any governmental entity alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"); (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (iv) has not received

written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any governmental entity alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) has not received written notice that the FDA or any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any governmental entity is considering such action; and (vi) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(ss) Except as would not, individually or in the aggregate, reasonably be expected to result in a material adverse effect on the Company and its subsidiaries, taken as a whole, the Company and each of its subsidiaries are, and at all prior times were, in compliance with all applicable data privacy and data protection laws and regulations regarding the collection, use, transfer, storage, processing (including by third parties), protection, disposal or disclosure of Personal Data collected from or provided by third parties, including, without limitation, the European Union General Data Protection Regulation ("**GDPR**") (EU 2016/679) and the California Consumer Privacy Act ("**CCPA**") of 2018 (collectively, the "**Privacy Laws**"). "**Personal Data**" has the meaning set forth in the Privacy Laws and includes, without limitation, any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended, "personal data" as defined by GDPR, or "personal information" as defined by the CCPA and any other piece of information relating to or capable of being associated directly or indirectly, with an identified or identifiable such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation, except any "protected health information" as defined by HIPAA. To ensure compliance with the Privacy Laws, the Company and its subsidiaries have made commercially reasonable efforts to put in place, materially comply with, and take reasonably appropriate steps to ensure compliance with their (i) policies and procedures relating to the collection, storage, processing (including by third parties), use, disclosure, handling, and analysis of Personal Data, and (ii) internal data security policies (collectively, the "**Policies**"). If required by applicable Privacy Laws, the Company has made commercially reasonable efforts to provide accurate notice of its Policies then in effect to its customers, employees, third party vendors and representatives with access to Personal Data. To the knowledge of the Company, each of the Policies provides accurate and sufficient notice as required under applicable Privacy Laws of the Company's then-current privacy practices relating to its subject matter and to the Company's knowledge

such Company Policies do not contain any material omissions of the Company's then-current privacy practices. The Company and its subsidiaries since inception have at all times made all disclosures relating to the Company's Processing of Personal Data to users or customers required by applicable Privacy Laws or contractual requirements except to the extent such failure to provide disclosures would reasonably be expected to, individually or in the aggregate, result in a material adverse effect on the Company and its subsidiaries, taken as a whole. None of such disclosures made or contained in any of the Policies have been inaccurate, misleading, deceptive or in violation of any Privacy Laws or Policies in any material respect. The execution, delivery and performance of this Agreement or any other agreement referred to in this Agreement will not result in a breach of violation of any Privacy Laws or Policies. The Company further certifies that to the knowledge of the Company neither it nor any subsidiary: (i) has received written notice of any actual or potential complaint under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to a regulatory requirement or audit issued by a governmental body, agency or court enforcing any Privacy Law; or (iii) is a party to any order, decree, or settlement agreement that imposes any obligation or liability under any Privacy Law.

(tt) Except as would not, individually or in the aggregate, reasonably be expected to result in a material adverse effect on the Company and its subsidiaries, taken as a whole, the Company's and its subsidiaries' information technology assets and equipment, computers, technology systems and other systems, networks, hardware, software, websites, applications, and databases (collectively, "**IT Systems**") are reasonably adequate for, and operate and perform as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, and, to the Company's knowledge, are free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its subsidiaries have implemented and maintained physical, technical and administrative controls, policies, procedures, and safeguards as required by applicable Privacy Laws that are designed to maintain and protect its confidential information and the integrity, continuous operation, redundancy and security of all IT Systems (including all Personal Data and sensitive, confidential or regulated data stored thereon (collectively, the "**Confidential Data**")). The Company and its subsidiaries have used reasonable efforts to establish, and have established, commercially reasonable disaster recovery and security plans, procedures and facilities for the business. There have been no internal or external security breaches or attacks, violations, outages or unauthorized uses of or accesses to the Confidential Data, or any other compromises of or relating to any IT Systems that would reasonably be expected to, individually or in the aggregate, result in a material adverse effect on the Company and its subsidiaries, taken as a whole. The Company and its subsidiaries have in the past and are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or

arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Confidential Data and to the protection of such IT Systems and Confidential Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, reasonably be expected to result in a material adverse effect on the Company and its subsidiaries, taken as a whole.

(uu) There are (and prior to the Closing Date, will be) no debt securities, convertible securities or preferred stock issued or guaranteed by the Company that are rated by a "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) under the Exchange Act.

2. Agreements to Sell and Purchase. The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the terms and conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Firm Shares set forth in Schedule I hereto opposite its name at $[•] a share (the "Purchase Price").

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to [•] Additional Shares at the Purchase Price, *provided*, however, that the amount paid by the Underwriters for any Additional Shares shall be reduced by an amount per share equal to any dividends declared by the Company and payable on the Firm Shares but not payable on such Additional Shares. The Representatives may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares or later than ten business days after the date of such notice. Additional Shares may be purchased as provided in Section 4 hereof solely for the purpose of covering over-allotments made in connection with the offering of the Firm Shares. On each day, if any, that Additional Shares are to be purchased (an "**Option Closing Date**"), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as the Representatives may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering*. The Company is advised by the Representatives that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in the judgment of the Representatives is advisable. The Company is further advised by the Representatives that the Shares are to be offered to the public initially at $[•] a share (the "**Public Offering Price**") and to certain dealers selected by the Representatives at a price that represents a concession not in excess of $[•] a share under the Public Offering Price, and that any Underwriter may allow, and such dealers may reallow, a concession, not in excess of $[•] a share, to any Underwriter or to certain other dealers.

4. *Payment and Delivery.* Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on [•], 2022,[1] or at such other time on the same or such other date, not later than [•], 2022,[2] as shall be designated in writing by the Representatives. The time and date of such payment are hereinafter referred to as the "**Closing Date**."

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than [•], 2022,[3] as shall be designated in writing by the Representatives.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as Morgan Stanley shall request not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to Morgan Stanley on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations*. The obligations of the Company to sell the Shares to the Underwriters and the several obligations of the Underwriters to purchase and pay for the Shares on the Closing Date are subject to the condition that the Registration Statement shall have become effective not later than [5:00 p.m.] (New York City time) on the date hereof.

The several obligations of the Underwriters are subject to the following further conditions:

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1 NTD: Insert date 2 business days or, in the event the offering is priced after 4:30 p.m. Eastern Time, 3 business days after date of Underwriting Agreement.

2 NTD: Insert date 5 business days after the date inserted in accordance with previous footnote.

3 NTD: Insert date 10 business days after the expiration of the green shoe option.

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) no order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission; and

(ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus and the Prospectus that, in the judgment of the Representatives, is material and adverse and that makes it, in the judgment of the Representatives, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus and the Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company, to the effect set forth in Sections 5(a)(i) and 5(a)(ii) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

(c) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Fenwick & West LLP, outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Underwriters.

(d) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Cooley LLP, counsel for the Underwriters, dated the Closing Date, in form and substance satisfactory to the Underwriters.

(e) The Underwriters shall have received on the Closing Date an opinion of Dechert LLP, intellectual property counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Underwriters.

(f) The Underwriters shall have received on the Closing Date an opinion of Hyman, Phelps & McNamara, P.C., regulatory counsel for the Company, dated the Closing Date, in form and substance satisfactory to the Underwriters.

With respect to Sections 5(c), (d), (e) and (f) above, each legal counsel may state that their opinions and beliefs are based upon their participation in the preparation of the Registration Statement, the Time of Sale Prospectus and the Prospectus and any amendments or supplements thereto and review and discussion of the contents thereof, but are without independent check or verification, except as specified.

The opinion and negative assurance letter of Fenwick & West LLP and the opinions of Dechert LLP and Hyman, Phelps & McNamara, P.C. descried in Sections 5(c), (e) and (f), respectively, above shall be rendered to the Underwriters at the request of the Company and shall so state therein.

(g) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Deloitte & Touche LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(h) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, executed by substantially all securityholders, and all officers and directors of the Company relating to restrictions on sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to the Representatives on or before the date hereof (the "**Lock-up Agreements**"), shall be in full force and effect on the Closing Date.

(i) The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to the Representatives on the applicable Option Closing Date of the following:

(i) a certificate, dated the Option Closing Date and signed by an executive officer of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 5(b) hereof remains true and correct as of such Option Closing Date;

(ii) an opinion and negative assurance letter of Fenwick & West LLP, outside counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(c) hereof;

(iii) an opinion and negative assurance letter of Cooley LLP, counsel for the Underwriters, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(d) hereof;

(iv) a letter dated the Option Closing Date, in form and substance satisfactory to the Underwriters, from Deloitte & Touche LLP, independent public accountants, substantially in the same form and substance as the letter furnished to the Underwriters pursuant to Section 5(g) hereof; *provided* that the letter delivered on the Option Closing Date shall use a "cut-off date" not earlier than two business days prior to such Option Closing Date;

(v) an opinion of Dechert LLP, intellectual property counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(e) hereof;

(vi) an opinion of Hyman, Phelps & McNamara, P.C., regulatory counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(f) hereof; and

(vii) such other documents as the Representatives may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

6. *Covenants of the Company*. The Company covenants with each Underwriter as follows:

(a) To furnish to the Representatives, without charge, one signed copy of the Registration Statement (including exhibits thereto) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto) and to furnish to the Representatives in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as the Representatives may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to the Representatives a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which the Representatives reasonably object, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) To furnish to the Representatives a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which the Representatives reasonably object.

(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the reasonable opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the reasonable opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses the Representatives will furnish to the Company) to which Shares may have been sold by the Representatives on behalf of the Underwriters and to any

other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) If required by applicable law, to endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Representatives shall reasonably request; *provided*, however, that nothing contained herein shall require the Company to qualify to do business in any jurisdiction, to execute a general consent of service of process in any jurisdiction or to subject itself to taxation in any jurisdiction in which it is not otherwise subject.

(h) To make generally available to the Company's security holders and to the Representatives as soon as reasonably practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder; *provided*, however, that the Company will be deemed to have furnished such statement to its securityholders to the extent it is filed on the Commission's Electronic Data Gathering, Analysis and Retrieval System.

(i) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and

qualification of the offering of the Shares by the Financial Industry Regulatory Authority, *provided* that the fees and expenses of counsel pursuant to clauses (iii) and (iv) shall not, in the aggregate, exceed $35,000, (v) all fees and expenses in connection with the preparation and filing of the registration statement on Form 8-A relating to the Common Stock and all costs and expenses incident to listing the Shares on Nasdaq, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depositary, (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, (ix) the document production charges and expenses associated with printing this Agreement and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make. It is understood, however, that except as provided in this Section, Section 8 titled "Indemnity and Contribution", and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make and all travel and other expenses of the Underwriters or any of their employees incurred by them in connection with participation in investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares.

(j) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (a) completion of the distribution of the Shares within the meaning of the Securities Act and (b) completion of the Restricted Period (as defined in this Section 6).

(k) If at any time following the distribution of any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act there occurred or occurs an event or development as a result of which such Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(l) The Company will deliver to each Underwriter (or its agent), on the date of execution of this Agreement, a properly completed and executed Certification Regarding Beneficial Owners of Legal Entity Customers, together with copies of identifying documentation, and the Company undertakes to provide such additional supporting documentation as each Underwriter may reasonably request in connection with the verification of the foregoing Certification.

The Company also covenants with each Underwriter that, without the prior written consent of the Representatives and Company, LLC, it will not, and will not publicly disclose an intention to, during the period ending 180 days after the date of the Prospectus (the "**Restricted Period**") (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (3) confidentially submit any draft registration statement or file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (a) the Shares to be sold hereunder, (b) the issuance by the Company of shares of Common Stock upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof as described in each of the Time of Sale Prospectus, Prospectus and Registration Statement, (c) facilitating the establishment of a trading plan on behalf of a stockholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period, (d) grants of options, restricted stock or other equity awards and the issuance of Common Stock or securities convertible into or exercisable for Common Stock to employees, officers, directors, advisors, or consultants of the Company pursuant to the terms of a plan in effect on the date hereof and described in the Time of Sale Prospectus, Prospectus and Registration Statement, *provided* that the Company shall cause each recipient of such grants of options, restricted stock or other equity awards to execute and deliver to the Representatives an agreement substantially in the form of the Lock-up Agreements described in Section 5(h) hereof if such recipient has not already delivered one, (e) the filing of a registration statement on Form S-8 to register Common Stock issuable

pursuant to any employee benefit plans, qualified stock option plans or other employee compensation plans described in the Time of Sale Prospectus, Prospectus and Registration Statement and *provided* that the recipients of such securities provide to the Representatives a signed Lock-up Agreement substantially in the form of the Lock-up Agreements described in Section 5(h) hereof, (f) the issuance by the Company of shares of Common Stock or any securities convertible into or exercisable or exchangeable for, Common Stock, or the entrance into an agreement to issue Common Stock or any securities convertible into, or exercisable or exchangeable for, Common Stock, in connection with any merger, joint venture, strategic alliances, commercial or other collaborative transaction or the acquisition or license of the business, property, technology or other assets of another individual or entity or the assumption of an employee benefit plan in connection with a merger or acquisition; *provided* that the aggregate number of shares of Common Stock or any securities convertible into, or exercisable or exchangeable for, Common Stock that the Company may issue or agree to issue pursuant to this clause (f) shall not exceed 5% of the total outstanding share capital of the Company immediately following the issuance of the shares; and *provided, further,* that the recipients of such securities provide the Representatives with a signed Lock-up Agreement substantially in the form of the Lock-up Agreement described in Section 6 hereof.

If the Representatives, in their sole discretion, agree to release or waive the restrictions on the transfer of Shares set forth in a Lock-up Agreement for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit B hereto through a major news service at least two business days before the effective date of the release or waiver.

7. *Covenants of the Underwriters*. Each Underwriter severally and not jointly, covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

8. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) that arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show as defined in Rule 433(h) under the

Securities Act (a "**road show**"), the Prospectus or any amendment or supplement thereto, or any Testing-the-Waters Communication, or arise out of, or are based upon, any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any such untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriters through the Representatives consists of the Underwriting Information (as defined below). The Company agrees and confirms that references to "affiliates" of Morgan Stanley that appear in this Agreement shall be understood to include Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus, road show or the Prospectus or any amendment or supplement thereto, it being understood and agreed that the only such information furnished by any Underwriter through the Representatives consists of the following information in the Prospectus: [the concession figure in the [•] paragraph and the information set forth in the [•] and [•] paragraphs, in each case under the caption "Underwriters" (the "**Underwriting Information**")][4].

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the "**indemnified party**") shall promptly notify the person against whom such indemnity may be sought (the "**indemnifying party**") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed in writing to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include

[4] NTD: To finalize once S-1 section is complete.

both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonably incurred fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by the Representatives, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding.

(d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the

Shares (after deducting underwriting discounts and commissions but before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. *Termination*. The Underwriters may terminate this Agreement by notice given by the Representatives to the Company, if after the execution and delivery of this Agreement and prior to or on the Closing Date or any Option Closing Date, as the case

may be, (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE MKT, Nasdaq or other relevant exchanges, (ii) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in the judgment of the Representatives, is material and adverse and which, individually or together with any other event specified in this clause (v), makes it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

10. *Effectiveness; Defaulting Underwriters*. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as the Representatives may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to the Representatives and the Company for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either the Representatives or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement (other than due to a termination pursuant to clauses (i), (iii), (iv) or (v) of Section 9), the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the reasonably incurred fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder; *provided*, that if the Company shall be unable to perform its obligations under this Agreement for reason of a default by any of the Underwriters, the Company shall not be obligated to reimburse the defaulting Underwriters.

11. *Entire Agreement*. (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arm's length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement, any contemporaneous written agreements and prior written agreements (to the extent not superseded by this Agreement), if any, (iii) the Underwriters may have interests that differ from those of the Company, and (iv) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice, or solicitation of any action by the Underwriters with respect to any entity or natural person. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Recognition of the U.S. Special Resolution Regimes*. (a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Section a "**BHC Act Affiliate**" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). "**Covered Entity**" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). "**Default Right**" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. "**U.S. Special Resolution Regime**" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

13. *Counterparts and Electronic Signatures*. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. Electronic signatures complying with the New York Electronic Signatures and Records Act (N.Y. State Tech. §§ 301-309), as amended from time to time, or other applicable law will be deemed original signatures for purposes of this Agreement. Transmission by telecopy, electronic mail or other transmission method of an executed counterpart of this Agreement will constitute due and sufficient delivery of such counterpart.

14. *Applicable Law*. This Agreement, and any claim, controversy or dispute arising under or related to this Agreement and any transaction contemplated by this Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

15. *Headings*. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

16. *Notices*. All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to the Representatives in care of Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Attention: Equity Syndicate Desk, with a copy to the Legal Department; Jefferies LLC, 520 Madison Avenue, New York, New York 10022, Attention: General Counsel; or Cowen and Company, LLC, 599 Lexington Avenue, New York, New York 10022, Attention: Head of Equity Capital Markets, Fax: (646) 562-1249 with a copy to the General Counsel, Fax: (646) 562-1130, and if to the Company shall be delivered, mailed or sent to Third Harmonic Bio, Inc., 300 Technology Square, 8th Floor, Cambridge, Massachusetts 02139, Attention: Chief Financial Officer.

[Signature page follows.]

Very truly yours,

**THIRD HARMONIC BIO, INC.**

By: _____
Name: Robert Ho
Title: Chief Financial Officer

Accepted as of the date hereof

Morgan Stanley & Co. LLC
Jefferies LLC
Cowen and Company, LLC
Acting severally on behalf of themselves and
the several Underwriters named in
Schedule I hereto.

Morgan Stanley & Co. LLC

By: _____
Name:
Title:

Jefferies LLC

By: _____
Name:
Title:

Cowen and Company, LLC

By: _____
Name:
Title:

*[Signature Page to Underwriting Agreement]*

**SCHEDULE I**

| Underwriter | Number of Firm Shares To Be Purchased |
|---|---|
| Morgan Stanley & Co. LLC | |
| Jefferies LLC | |
| Cowen and Company, LLC | |
| LifeSci Capital LLC | |
| Total: | |

**SCHEDULE II**

**Time of Sale Prospectus**

1. Preliminary Prospectus issued [•], 2022
2. [identify all free writing prospectuses filed by the Company under Rule 433(d) of the Securities Act]
3. [free writing prospectus containing a description of terms that does not reflect final terms, if the Time of Sale Prospectus does not include a final term sheet]
4. [orally communicated pricing information such as price per share and size of offering if a Rule 134 pricing term sheet is used at the time of sale instead of a pricing term sheet filed by the Company under Rule 433(d) as a free writing prospectus]

Testing-the-Waters Communications

None

**EXHIBIT A**

**FORM OF LOCK-UP AGREEMENT**

_____, 2022

Morgan Stanley & Co. LLC
Jefferies LLC
Cowen and Company, LLC

c/o Morgan Stanley & Co. LLC
1585 Broadway
New York, NY 10036

c/o Jefferies LLC
520 Madison Avenue
New York, NY 10022

c/o Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

Ladies and Gentlemen:

The undersigned understands that Morgan Stanley & Co. LLC ("**Morgan Stanley**"), Jefferies LLC ("**Jefferies**") and Cowen and Company, LLC ("**Cowen**" and together with Morgan Stanley and Jefferies, the "**Representatives**"), propose to enter into an underwriting agreement (the "**Underwriting Agreement**") with Third Harmonic Bio, Inc., a Delaware corporation (the "**Company**"), providing for the public offering (the "**Public Offering**") by the several underwriters, including the Representatives (the "**Underwriters**"), of shares (the "**Shares**") of the common stock, par value $0.0001 per share, of the Company (the "**Common Stock**").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, and will not publicly disclose an intention to, during the period commencing on the date hereof and ending 180 days after the date of the final prospectus (the "**Restricted Period**") relating to the Public Offering (the "**Prospectus**"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock beneficially owned (as such term

is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The undersigned acknowledges and agrees that the foregoing precludes the undersigned from engaging in any hedging or other transactions designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition of any shares of Common Stock, or securities convertible into or exercisable or exchangeable for Common Stock, even if any such sale or disposition transaction or transactions would be made or executed by or on behalf of someone other than the undersigned. The foregoing paragraph shall not apply to:

(a) transactions relating to shares of Common Stock or other securities acquired in the Public Offering or in open market transactions after the completion of the Public Offering, *provided* that no filing under Section 16(a) of the Exchange Act or other public announcement shall be required or shall be voluntarily made in connection with subsequent sales of Common Stock or other securities acquired in the Public Offering or in such open market transactions;

(b) transfers or distributions of shares of Common Stock or any security convertible into Common Stock (i) as a bona fide gift or charitable contribution, (ii) by will or intestacy or to any member of the undersigned's immediate family or to a trust for the direct or indirect benefit of the undersigned and/or any member of the undersigned's immediate family, (iii) to any corporation, partnership, limited liability company or other business entity, all of the beneficial ownership interests of which, in each such case, are held by the undersigned or any member of the undersigned's immediate family, (iv) if the undersigned is an entity, to limited partners, members, stockholders or holders of similar equity interests in the undersigned, or (v) if the undersigned is an entity, to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the undersigned, or to any investment fund or other entity controlled or managed by the undersigned or affiliated with the undersigned; *provided* that, in the case of any transfer or distribution pursuant to this clause (b), (A) each transferee, donee or distributee shall sign and deliver a lock-up agreement substantially in the form of this agreement, (B) such transfer or distribution does not involve a disposition for value, and (C) no filing under Section 16(a) of the Exchange Act or other public announcement reporting a reduction in beneficial ownership of shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock shall be required or shall be voluntarily made during the Restricted Period (other than, in the case of a transfer or other disposition pursuant to clause (i) or (ii) above, a Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting with respect to the Company under the Exchange Act, any such filing will indicate by footnote disclosure or otherwise the nature of the transfer or disposition);

(c) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock by operation of law pursuant to a qualified domestic order or other court order or in connection with a divorce settlement; *provided* that (i) any filing under Section 16(a) of the Exchange Act made during the Restricted Period shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described in this clause (c) and (B) no securities were sold by the undersigned, (ii) the undersigned does not otherwise voluntarily effect any other public filing or report regarding such transfers during the Restricted Period, and (iii) each transferee shall sign and deliver a lock-up agreement substantially in the form of this agreement;

(d) (i) the exercise of options or other similar awards or the vesting or settlement of awards granted pursuant to the Company's equity incentive plans as described in the Prospectus and outstanding on the date of the Underwriting Agreement (including the delivery and receipt of shares of Common Stock, other awards or any securities convertible into or exercisable or exchangeable for shares of Common Stock in connection with such exercise, vesting or settlement), or (ii) the transfer or disposition of shares of Common Stock or any securities convertible into shares of Common Stock by the undersigned to the Company (or the purchase and cancellation of the same by the Company) upon a vesting or settlement event of the Company's securities or upon the exercise of options to purchase the Company's securities expiring during the Restricted Period, on a "cashless" or "net exercise" basis solely to the extent permitted by the instruments representing such options, in each case pursuant to the Company's equity incentive plans as described in the Prospectus and solely to cover withholding tax obligations in connection with such transaction and any transfer to the Company for the payment of taxes as a result of such transaction, *provided* that (A) the shares of Common Stock received upon the exercise, vesting, or settlement of the options or other awards described in this clause (d) are subject to the terms of this agreement, (B) no public disclosure or filing under Section 16(a) of the Exchange Act shall be voluntarily made during the Restricted Period,(C) to the extent a filing under Section 16(a) of the Exchange Act is required during the Restricted Period as a result of transfers described in clause (d)(i), it shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in clause (d)(i) and that the shares of Common Stock received upon the exercise, vesting, or settlement of such options or other awards are subject this agreement, and (D) with respect to any transfers or dispositions described in clause (d)(ii) above, no public disclosure or filing shall be made during the Restricted Period within 60 days after the date of the Prospectus (unless such equity award would otherwise expire during such period), and after such 60th day, if the undersigned is required to file a report reporting a reduction in beneficial ownership of shares of Common Stock during the Restricted Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in clause (d)(ii) and that the shares of Common Stock received upon such exercise or settlement are subject to this agreement;

(e) transfers to the Company pursuant to the repurchase of shares of Common Stock in connection with the termination of the undersigned's employment with the Company or other service relationship with the Company pursuant to contractual agreements with the Company as in effect as of the date of the Prospectus and disclosed in the Prospectus, *provided* that, if the undersigned is required to file a report reporting a reduction in beneficial ownership of shares of Common Stock during the Restricted Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (e) and no public disclosure or filing shall be voluntarily made;

(f) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock that are required to effect the recapitalization of the Company as described in the Prospectus and completed prior to the completion of the Public Offering, including the conversion of the outstanding preferred shares of the Company, *provided* that (A) any shares of Common Stock received upon the exercise or exchange of any such convertible securities remain subject to the terms of this agreement and (B) no filing under Section 16(a) of the Exchange Act or other public filing, report or announcement shall be voluntarily made and, if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of Common Stock in connection with such transfer or distribution shall be legally required during the Restricted Period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer;

(h) facilitating the establishment of a trading plan on behalf of a stockholder, officer, or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period; or

(i) transfers pursuant to a bona fide third-party tender offer for all outstanding shares of Common Stock or securities convertible into or exercisable or exchangeable for shares of Common Stock, merger, amalgamation, consolidation or other similar transaction approved by the Company's Board of Directors and made to all holders of the Company's securities involving a "change of control" of the Company (including, without limitation, the entering into any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of shares of Common Stock or other such securities in connection with such transaction, or vote any shares of Common Stock or other such securities in favor of any such transaction); *provided* that in the event that such tender offer, merger, amalgamation, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this agreement.

In addition, the undersigned agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, and will not publicly disclose intention to, during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

For purposes of this agreement, (i) "immediate family" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin, and (ii) "change of control" shall mean the consummation of any bona fide third party tender offer, merger, amalgamation, consolidation or other similar transaction the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of greater than 75% of total voting power of all outstanding voting securities of the Company (or the surviving entity).

If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing restrictions shall be equally applicable to any issuer-directed Shares the undersigned may purchase in the Public Offering.

If the undersigned is an officer or director of the Company, (i) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, the Representatives will notify the Company of the impending release or waiver, and (ii) the Company will agree or has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration or to an immediate family member as defined in FINRA Rule 5130(i)(5) and (b) the transferee has agreed in writing to be bound by the same terms described in this agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering of the Shares and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Underwriters may provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Public Offering, the Underwriters are not making a recommendation to you to participate in the Public Offering or sell any Shares at the price determined in the Public Offering, and nothing set forth in such disclosures or documentation is intended to suggest that any Underwriter is making such a recommendation.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

The undersigned understands that, if (i) the Representatives, on the one hand, or the Company, on the other hand, informs the other in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Public Offering, (ii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the securities to be sold thereunder, (iii) the registration statement related to the Public Offering is withdrawn prior to the execution of the Underwriting Agreement or (iv) the Underwriting Agreement is not executed on or before November 15, 2022 (*provided* that the Company may by written notice to the undersigned prior to November 15, 2022 extend such date for a period of up to an additional three months in the event that the Underwriting Agreement has not been executed by such date), then, in each case, this agreement shall automatically, and without any action on the part of any other party, be of no further force and effect, and the undersigned shall be automatically released from all obligations under this agreement.

This agreement shall be governed by and construed in accordance with the laws of the State of New York.

*[Signature page follows]*

Very truly yours,

Name of Securityholder *(Print exact name)*

By: _____
Signature

If not signing in an individual capacity:

Name of Authorized Signatory *(Print)*

Title of Authorized Signatory *(Print)*

*(indicate capacity of person signing if signing as custodian, trustee, or on behalf of an entity)*

**EXHIBIT B**

**FORM OF WAIVER OF LOCK-UP**

_____, 20__

[Name and Address of
Officer or Director
Requesting Waiver]

Dear Mr./Ms. [Name]:

This letter is being delivered to you in connection with the offering by Third Harmonic Bio, Inc. (the "**Company**") of [•] shares of common stock, $0.0001 par value per share (the "**Common Stock**"), of the Company and the lock-up agreement dated ____, 2022 (the "**Lock-up Agreement**"), executed by you in connection with such offering, and your request for a [waiver] [release] dated ____, 20__, with respect to ____ shares of Common Stock (the "**Shares**").

Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC hereby agree to [waive] [release] the transfer restrictions set forth in the Lock-up Agreement, but only with respect to the Shares, effective _____, 20__; provided, however, that such [waiver] [release] is conditioned on the Company announcing the impending [waiver] [release] by press release through a major news service at least two business days before effectiveness of such [waiver] [release]. This letter will serve as notice to the Company of the impending [waiver] [release].

Except as expressly [waived] [released] hereby, the Lock-up Agreement shall remain in full force and effect.

Very truly yours,

Morgan Stanley & Co. LLC
Jefferies LLC
Cowen and Company, LLC
Acting severally on behalf of themselves and the several
Underwriters named in Schedule I hereto

Morgan Stanley & Co. LLC

By: _____
Name:
Title:

Jefferies LLC

By: _____
Name:
Title:

Cowen and Company, LLC

By: _____
Name:
Title:

cc: Third Harmonic Bio, Inc.

**FORM OF PRESS RELEASE**

Third Harmonic Bio, Inc.
[Date]

Third Harmonic Bio, Inc. (the "**Company**") announced today that Morgan Stanley & Co. LLC, Jefferies LLC and Cowen and Company, LLC, the lead book-running managers in the Company's recent public sale of [•] shares of common stock is [waiving][releasing] a lock-up restriction with respect to ____ shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver][release] will take effect on ____, 20__, and the shares may be sold on or after such date.

**This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.**

# AMENDED AND RESTATED

# CERTIFICATE OF INCORPORATION

# OF

# THIRD HARMONIC BIO, INC.

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**AMENDED AND RESTATED**
**CERTIFICATE OF INCORPORATION**
**OF**
**THIRD HARMONIC BIO, INC.**

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Third Harmonic Bio, 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 Third Harmonic Bio, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on April 25, 2019.

2. That 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 1s Third Harmonic Bio, Inc. (the "**Corporation**").

**SECOND:** The address of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

**THIRD:** The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 72,731,000 shares of Common Stock, $0.0001 par value per share ("**Common Stock**") and (ii) 49,624,190 shares of Preferred Stock, $0.000 I 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 Amended and Restated Certificate of Incorporation (the "**Certificate of Incorporation**") that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

13,970,000 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-1 Preferred Stock**"; 13,750,000 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-2 Preferred Stock**"; 7,812,501 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-3 Preferred Stock**" (the Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock together being referred to herein as the "**Series A Preferred Stock**") and 14,091,689 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**".

The following rights, preferences, powers, privileges and restrictions, qualifications and limitations shall apply to the Preferred Stock. Unless otherwise indicated, references to "sections" or "subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

1.1 The holders of then outstanding shares of Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities and rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock of the Corporation) at the rate of eight percent (8%) of the Series A-1 Original Issue Price, Series A-2 Original Issue Price, Series A-3 Original Purchase Price or Series B Original Issue Price (as such terms are defined below), as applicable, per share of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B

Preferred Stock, per annum, payable only when, as and if declared by the Board of Directors of the Corporation. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to the greater of (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (I) 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 (II) the number of shares of Common Stock issuable upon conversion of a share of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B Preferred Stock, as applicable, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (I) 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 (II) multiplying such fraction by an amount equal to the Series A-1 Original Issue Price, Series A-2 Original Issue Price, Series A-3 Original Purchase Price or Series B Original Issue Price (in each case as defined below), as applicable; 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 dividends. The "**Series A-1 Original Issue Price**" shall mean $1.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The "**Series A-2 Original Issue Price**" shall mean $1.60 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The "**Series A-3 Original Issue Price**" shall mean $2.56 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The "**Series B Original Issue Price**" shall mean $7.4512 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock.

2.1.1 In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, out of the consideration payable to stockholders in such Deemed

Liquidation Event or the Available Proceeds (as defined below), before any payment shall be made to the holders of Common Stock, Series A-1 Preferred Stock, Series A-2 Preferred Stock or Series A-3 Preferred Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series B Original Issue Price plus any dividends declared but unpaid thereon or (ii) such amount per share as would have been payable had all shares of such series of Series B 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 to the holders of Series B Preferred Stock is hereinafter referred to as the "**Series B 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 Series B Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.1, the holders of shares of Series B 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.

2.1.2 After the payment of the Series B Liquidation Amount to the holders of Series B Preferred Stock pursuant to Subsection 2.1.1, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Series A-3 Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, out of the consideration payable to stockholders in such Deemed Liquidation Event or the Available Proceeds (as defined below), before any payment shall be made to the holders of Common Stock, Series A-1 Preferred Stock or Series A-2 Preferred Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series A-3 Original Issue Price plus any dividends declared but unpaid thereon or (ii) such amount per share as would have been payable had all shares of such series of Series A-3 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 to the holders of Series A-3 Preferred Stock is hereinafter referred to as the "**Series A-3 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 Series A-3 Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.2, the holders of shares of Series A-3 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.

2.1.3 After the payment of the Series B Liquidation Amount to the holders of Series B Preferred Stock pursuant to Subsection 2.1.1 and payment of the Series A-3 Liquidation Amount to the holders of Series A-3 Preferred Stock pursuant to Subsection 2.1.2, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Series A-2 Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, out of the consideration payable to

stockholders in such Deemed Liquidation Event or the Available Proceeds, before any payment shall be made to the holders of Common Stock or Series A-1 Preferred Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series A-2 Original Issue Price plus any dividends declared but unpaid thereon or (ii) such amount per share as would have been payable had all shares of such series of Series A-2 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 to the holders of Series A-2 Preferred Stock is hereinafter referred to as the "**Series A-2 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 Series A-2 Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.3, the holders of shares of Series A-2 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.

2.1.4 After the payment of the Series B Liquidation Amount to the holders of Series B Preferred Stock pursuant to Subsection 2.1.1, the payment of the Series A-3 Liquidation Amount to the holders of Series A-3 Preferred Stock pursuant to Subsection 2.1.2 and the payment of the Series A-2 Liquidation Amount to the holders of Series A-2 Preferred Stock pursuant to Subsection 2.1.3, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Series A-1 Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, out of the consideration payable to stockholders in such Deemed Liquidation Event or the Available Proceeds, 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 Series A-1 Original Issue Price plus any dividends declared but unpaid thereon or (ii) such amount per share as would have been payable had all shares of such series of Series A-1 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 to the holders of Series A-1 Preferred Stock is hereinafter referred to as the "**Series A-1 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 Series A-1 Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.4, the holders of shares of Series A-1 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 Distribution of Remaining Assets. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment in full of all preferential amounts required to be paid to the holders of shares of Preferred Stock under Subsection 2.1, the remaining assets of the Corporation available for distribution to its stockholders 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 (i) the holders of a majority of the Preferred Stock then outstanding, voting together as a single class on an as-converted to Common Stock basis (the "**Requisite Holders**"), and (ii) the holders of a majority of the outstanding shares of Series B Preferred Stock, voting together as a single class and on an as-converted basis (the "**Series B 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, 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, in either case in the same proportions and with the same rights, preferences and privileges as the rights, preferences and privileges as the capital stock of the Corporation immediately prior to such to such merger or consolidation (including the relative priority among such capital stock in respect of (i) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (ii) the rights with respect to payment of dividends or (iii) the rights of redemption in effect as of immediately prior to such transaction or series of related transactions); or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

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 to require the redemption of such shares of Preferred Stock, and (ii) if the Requisite Holders so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "**Available Proceeds**"), on the one hundred fiftieth (150th) day after such Deemed Liquidation Event (the "**Redemption Date**"), to redeem all outstanding shares of Series B Preferred Stock, Series A-3 Preferred Stock, Series A-2 Preferred Stock and Series A-1 Preferred Stock at a price per share equal to the Series B Liquidation Amount, Series A-3 Liquidation Amount, Series A-2 Liquidation Amount or Series A-1 Liquidation Amount, as applicable. 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. Notwithstanding the foregoing, in the event of a redemption pursuant to this Subsection 2.3.2(b).

(i) if the Available Proceeds are not sufficient to redeem all outstanding shares of Series B Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Series B Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts that 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 of Series B Preferred Stock to have been redeemed as soon as practicable after the Corporation has funds legally available therefor;

(ii) if the Available Proceeds are not sufficient (after redemption of all of the shares of Series B Preferred Stock) to redeem all outstanding shares of Series A Preferred Stock, (y) the Available Proceeds shall first be used to redeem all outstanding shares of Series A-3 Preferred Stock prior to any redemption of shares of Series A-2 Preferred Stock or Series A-1 Preferred Stock and (z) if the Available Proceeds are not sufficient to redeem all outstanding shares of Series A-3 Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Series A-3 Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts that 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 of Series A-3 Preferred Stock to have been redeemed as soon as practicable after the Corporation has funds legally available therefor;

(iii) if the Available Proceeds are not sufficient (after redemption of all of the shares of Series A-3 Preferred Stock) to redeem all outstanding shares of Series A-2 Preferred Stock and Series A-1 Preferred Stock, (y) the Available Proceeds shall first be used to redeem all outstanding shares of Series A-2 Preferred Stock prior to any redemption of shares of Series A-1 Preferred Stock and (z) if the Available Proceeds are not sufficient to redeem all outstanding shares of Series A-2 Preferred Stock, the Corporation shall (after the redemption of all shares of Series A-3 Preferred Stock as provided in clause (i) above) redeem a pro rata portion of each holder's shares of Series A-2 Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts that 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 of Series A-2 Preferred Stock to have been redeemed as soon as practicable after the Corporation has funds legally available therefor; and

(iv) if the Available Proceeds are not sufficient (after redemption of all of the shares of Series A-3 Preferred Stock and Series A-2 Preferred Stock) to redeem all outstanding shares of Series A-1 Preferred Stock, the Corporation shall (after the redemption of all shares of Series A-3 Preferred Stock and Series A-2 Preferred Stock as provided in clauses (i) and (ii) above) redeem a pro rata portion of each holder's shares of Series A-1 Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts that 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 of Series A-1 Preferred Stock to have been redeemed as soon as practicable after the Corporation has funds legally available therefor.

(c) Following an election of the Requisite Holders to demand redemption as provided in Subsection 2.3.2(b), the Corporation shall promptly and no more than thirty (30) days thereafter send a notice (the "**Redemption Notice**") to each holder of Preferred Stock stating (i) the number of Shares of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and/or Series B Preferred Stock held by such holder as of the date of such election, (ii) the price or prices at which the shares of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and/or Series B Preferred Stock will be redeemed (the "**Redemption Price**"), (iii) the date upon which the holder's right to convert such shares terminates (as determined in accordance with Subsection 4.1), and (iv) that such 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.

(d) On or before the Redemption Date, each holder 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 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 applicable 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.

(e) If the Redemption Notice shall have been duly delivered to each holder of Preferred Stock, and, if on the Redemption Date the applicable Redemption Price payable upon redemption of the shares of Preferred Stock 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 the 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 after the 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 applicable Redemption Price without interest upon surrender of their certificate or certificates therefor.

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 by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.3.4 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 a holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect four directors of the Corporation (the "**Series A Directors**"). The holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the

Corporation (the "**Series B Director**" and, together with the Series A Directors, the "**Preferred Directors**"). Any director elected as provided in the preceding two sentences 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 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 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. If the holders of shares of Series B Preferred Stock fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the second sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series B Preferred Stock elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, 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 9,924,900 shares of Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this 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 Certificate of Incorporation or Bylaws of the Corporation;

3.3.3 create, or authorize the creation of, or issue or obligate itself to issue (other than under a plan, agreement or arrangement approved by the Requisite Holders) shares of, any class or series of capital stock, or increase the authorized number of shares of Preferred Stock or any class or series thereof or increase the authorized number of shares of any additional class or series of capital stock of the Corporation;

3.3.4 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series B Preferred Stock, Series A-1 Preferred Stock, Series A-2 Preferred Stock, or Series A-3 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series B Preferred Stock, Series A-1 Preferred Stock, Series A-2 Preferred Stock or Series A-3 Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series B Preferred Stock, Series A-1 Preferred Stock, Series A-2 Preferred Stock, or Series A-3 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series B Preferred Stock, Series A-1 Preferred Stock, Series A-2 Preferred Stock, or Series A-3 Preferred Stock in respect of any such right, preference or privilege;

3.3.5 cause or permit any of its subsidiaries to sell, issue, sponsor, create or distribute any digital tokens, cryptocurrency or other blockchain-based assets (collectively, "**Tokens**"), including through a pre-sale, initial coin offering, token distribution event or crowdfunding, or through the issuance of any instrument convertible into or exchangeable for Tokens;

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 incur aggregate indebtedness in excess of $1,000,000, or permit any subsidiary to take any such action with respect to any debt security or aggregate indebtedness, other than equipment leases, bank lines of credit or trade payables incurred in the ordinary course, unless such debt security or indebtedness has received the prior approval of the Corporation's Board of Directors, including the approval of a majority of the Preferred 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; or

3.3.9 increase or decrease the authorized number of directors constituting the Board of Directors.

3.4 Series A-1 Preferred Stock Protective Provisions. At any time when at least 2,794,000 shares of Series A-1 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A-1 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 Certificate of Incorporation) the written consent or affirmative vote of holders of a majority of the outstanding shares of Series A-1 Preferred Stock, 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:

3.4.1 amend, alter or repeal any provision of this Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the Series A-1 Preferred Stock in a manner disproportionate to the rest of the Preferred Stock;

3.4.2 increase or decrease the authorized number of shares of Series A-1 Preferred Stock; or

3.4.3 amend, waive or modify the Series A-1 Conversion Price (including any anti-dilution rights with respect thereto), it being understood that adjustments of the Series A-1 Conversion Price in accordance with the terms of Section 4 shall not be deemed to be an amendment, waiver or modification of the Series A-1 Conversion Price.

3.5 Series A-2 Preferred Stock Protective Provisions. At any time when at least 2,750,000 shares of Series A-2 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A-2 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 Certificate of Incorporation) the written consent or affirmative vote of holders of at least seventy percent (70%) of the outstanding shares of Series A-2 Preferred Stock, 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:

3.5.1 amend, alter or repeal any provision of this Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the Series A-2 Preferred Stock in a manner disproportionate to the rest of the Preferred Stock;

3.5.2 increase or decrease the authorized number of shares of Series A-2 Preferred Stock; or

3.5.3 amend, waive, or modify the Series A-2 Conversion Price (including any anti-dilution rights with respect thereto), it being understood that adjustments of the Series A-2 Conversion Price in accordance with the terms of Section 4 shall not be deemed to be an amendment, waiver or modification of the Series A-2 Conversion Price.

3.6 Series A-3 Preferred Stock Protective Provisions. At any time when at least 1,562,500 shares of Series A-3 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A-3 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 Certificate of Incorporation) the written consent or affirmative vote of holders of a majority of the outstanding shares of Series A-3 Preferred Stock, 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:

3.6.1 amend, alter or repeal any provision of this Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the Series A-3 Preferred Stock in a manner disproportionate to the rest of the Preferred Stock;

3.6.2 increase or decrease the authorized number of shares of Series A-3 Preferred Stock; or

3.6.3 amend, waive, or modify the Series A-3 Conversion Price (including any anti-dilution rights with respect thereto), it being understood that adjustments of the Series A-3 Conversion Price in accordance with the terms of Section 4 shall not be deemed to be an amendment, waiver or modification of the Series A-3 Conversion Price.

3.7 Series B Preferred Stock Protective Provisions. At any time when at least 2,013,099 shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series B Preferred Stock) 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 Certificate of Incorporation) the written consent or affirmative vote of the Series B 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:

3.7.1 amend, alter, waive or repeal any provision of this Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the Series B Preferred Stock in a manner disproportionate to the rest of the Preferred Stock (it being understood that any amendment, alteration, waiver or repeal of the Series B Preferred Stock rights in respect of (i) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (ii) the rights with respect to payment of dividends or (iii) the rights of redemption, (in each case whether an absolute amount or percentage and regardless of whether the liquidation preference for other series of Preferred Stock are affected) shall require the consent of the Series B Requisite Holders pursuant to Section 3.7.8);

3.7.2 authorize or issue any capital stock of the Corporation, or any securities that are convertible into capital stock of the Corporation having rights, preferences or privileges that rank senior to the Series B Preferred Stock;

3.7.3 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series B Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series B Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series B Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series B Preferred Stock in respect of any such right, preference or privilege;

3.7.4 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than 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;

3.7.5 increase or decrease the authorized number of shares of Series B Preferred Stock;

3.7.6 for a period of two years following the Series B Original Issue Date, consummate any merger, consolidation or any other Deemed Liquidation Event in which the unconditional cash consideration payable per share of Series B Preferred Stock at closing of the Deemed Liquidation Event would be less than the Series B Original Issue Price multiplied by 1.5;

3.7.7 amend, alter, waive or repeal this Section 3.7 or any other provision of this Certificate of Incorporation that provides for the approval of the Series B Requisite Holders or the holders of the Series B Preferred Stock as a separate series; or

3.7.8 amend, waive, or modify (A) the rights of the Series B Preferred Stock in respect of (i) the distribution of assets on the liquidation, dissolution or winding up of the Corporation (whether an absolute amount or percentage and regardless of whether the liquidation preference for other series of Preferred Stock are affected), (ii) payment of dividends or (iii) redemption and (B) the Series B Conversion Price (including any anti-dilution rights with respect thereto), it being understood that adjustments of the Series B Conversion Price in accordance with the terms of Section 4 shall not be deemed to be an amendment, waiver or modification of the Series B Conversion Price.

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 Series A-1 Original Issue Price by the Series A-1 Conversion Price (as defined below) in effect at the time of conversion, in the case of the Series A-1 Preferred Stock, by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below) in effect at the time of conversion, in the case of the Series A-2 Preferred Stock, by dividing the Series A-3 Original Issue Price by the Series A-3 Conversion Price (as defined below) in effect at the time of conversion, in the case of the Series A-3 Preferred Stock, or by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion, in the case of the Series B Preferred Stock. The "**Series A-1 Conversion Price**" shall initially be equal to $ 1.00. The "**Series A-2 Conversion Price**" shall initially be equal to $1.60. The "**Series A-3 Conversion Price**" shall initially be equal to $2.56. The "**Series B Conversion Price**" shall initially be equal to $7.4512. Each of the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and Series B Conversion Price is referred to as a "**Preferred Conversion Price.**" Such initial Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and Series B Conversion Price, and the rate at which shares of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and Series B Preferred Stock, respectively, 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 an election of redemption of any shares of Preferred Stock pursuant to Subsection 2.3.2(c), the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

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 Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B Conversion Price, respectively, 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively.

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 Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A- 3 Preferred Stock or Series B Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion price shall be made for any declared but unpaid dividends on the Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Conversion Price, or Series B Conversion Price, respectively, 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 Preferred Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) "**Series B Original Issue Date**" shall mean the date on which the first share of Series B Preferred Stock was issued.

(c) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series B 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 the approval of a majority of the Preferred 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 a majority of the Preferred Directors;

(vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including the approval of a majority of the Preferred Directors;

(vii) shares of Common Stock, Options or Convertible Securities issued as acquisition consideration pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including the approval of a majority of the Preferred Directors;

(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 a majority of the Preferred Directors; or

(ix) shares of Common Stock issued or issuable upon the conversion of Preferred Stock.

4.4.2 No Adjustment of Preferred Conversion Price. No adjustment in the Series A-1 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the outstanding shares of Series A-1 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series A-2 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least seventy percent (70%) of the outstanding shares of Series A-2 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series A-3 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the outstanding shares of Series A-3 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series B 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 Series B 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 Series B 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 Series A-1 Conversion Price, the Series A-2 Conversion Price, the Series A-3 Conversion Price or the Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively, 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price to an amount which exceeds the lower of (i) the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively, in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price. respectively 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 Series A-1 Conversion Price, Series A-2 Conversion Price. Series A-3 Conversion Price or Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised after the Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price pursuant to the terms of Subsection 4.4.4, the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, shall be readjusted to such Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively, 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively, that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Preferred Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series B 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 Series A-I Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price in effect immediately prior to such issuance or deemed issuance, then the applicable Preferred 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:

$$CP2 = CPI^* (A+ B) + (A+ C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) “CP2” shall mean the Series A-I Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) “CPI” shall mean the Series A-I Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, 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 CPI (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CPI ); 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 a Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, 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 Series B Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A-1 Conversion Price, the Series A-2 Conversion Price, the Series A-3 Conversion Price and the Series B 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 Series B Original Issue Date combine the outstanding shares of Common Stock, the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and Series B 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 Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, as applicable, shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B Conversion Price, respectively, 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 Series B 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 prov1s1ons 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 such series 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and/or Series B Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock. For the avoidance of doubt, nothing in this Subsection 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the General Corporation Law in connection with a merger triggering an adjustment hereunder, nor shall this Subsection 4.8 be deemed conclusive evidence of the fair value of the shares of any series of Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price or Series B 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 Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B Preferred Stock, respectively, a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B 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 Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price and/or Series B Conversion Price, as applicable, 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 Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock or Series B Preferred Stock, as applicable.

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 $7.4512 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 $75,000,000 of 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, including the approval of a majority of the Preferred Directors (a "**Qualified Public Offering**") or (b) the date and time, or the occurrence of an event, specified by vote or written consent of holders of at least 65% of the combined voting power of the shares of Preferred Stock then outstanding as calculated on an as-converted to Common Stock basis, provided that any such vote or written consent pursuant to this Section 5.1(b) shall require the vote or written consent of holders of Series B Preferred Stock that (A) hold at least 7% of the then outstanding shares of Series B Preferred Stock and (B) do not hold, and do not have any affiliates that hold, shares of any series of Series A Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent delivered pursuant to this Section 5.1 (b) 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. 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.

7. Waiver. Except as otherwise expressly provided 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 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 (as a separate series) 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 a majority of the shares of such series of Preferred Stock then outstanding.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

**FIFTH:** Subject to any additional vote required by this Certificate of Incorporation 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 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:** To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

**ELEVENTH:** The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are "**Covered Persons**"), unless

such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation. 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 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.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

**IN WITNESS WHEREOF**, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 17th day of December, 2021.

By: /s/ Natalie Holles
Name: Natalie Holles
Title: Chief Executive Officer

**CERTIFICATE OF AMENDMENT**

**TO THE**

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**

**THIRD HARMONIC BIO, INC.**

Third Harmonic Bio, Inc. (the "***Corporation***"), a corporation duly organized and existing under the General Corporation Law of the State of Delaware (the "***DGCL***"), does hereby certify that the following amendment to the Corporation's Amended and Restated Certificate of Incorporation, filed with the Delaware Secretary of State on December 17, 2021 (the "***Current Certificate***"), has been duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law, with the approval of such amendment by the Corporation's stockholders having been given by written consent without a meeting in accordance with Sections 228(d) and 242 of the DGCL:

1. The following two paragraphs are hereby added to follow the first paragraph of Article FOURTH of the Current Certificate:

"Contingent and effective upon the filing of this Certificate of Amendment to the Amended and Restated Certificate of Incorporation (the "***Certificate of Amendment***"), every 2.259 outstanding shares of Common Stock will be combined into and automatically, without any further action by the Corporation or the stockholders thereof, become one outstanding share of Common Stock of the Corporation (the "***Reverse Stock Split***"). No fractional share shall be issued in connection with the foregoing combination of the shares pursuant to the Reverse Split. The Corporation will pay in cash the fair value of such fractional shares, without interest and as determined in good faith by the Board of Directors of the Corporation when those entitled to receive such fractional shares are determined.

The Reverse Stock Split shall occur automatically without any further action by the holders of stockholders, and whether or not the certificates representing such shares have been surrendered to the Corporation; *provided, however*, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable as a result of the Reverse Stock Split unless the existing certificates evidencing the applicable shares of stock prior to the Reverse Stock Split are either delivered to the Corporation, or the holder notifies the Corporation that such certificates have been lost, stolen or destroyed, and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates."

2. The foregoing amendment to the Current Certificate has been duly approved by the Corporation's Board of Directors in accordance with Sections 141 and 242 of the DGCL.

3. The foregoing amendment to Current Certificate has been duly approved by the Corporation's stockholders in accordance with Sections 228 and 242 of the DGCL.

4. This Certificate of Amendment shall be effective upon filing with the Delaware Secretary of State.

**[SIGNATURE PAGE FOLLOWS]**

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its duly authorized officer this 7th day of September, 2022 and the foregoing facts stated herein are true and correct.

**THIRD HARMONIC BIO, INC.**

By: /s/ Natalie Holles
Name: Natalie Holles
Title: Chief Executive Officer

**Exhibit 4.1**


AMERICAN FINANCIAL PRINTING INCORPORATED – MINNEAPOLIS

COMMON STOCK

THIS CERTIFICATE IS TRANSFERABLE IN SOUTH SAINT PAUL, MN.

Third Harmonic Bio

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

SHARES

SEE REVERSE SIDE FOR CERTAIN DEFINITIONS

CUSIP 88427A 10 7

*THIS CERTIFIES THAT*

*is the owner of*

FULLY PAID AND NON-ASSESSABLE COMMON SHARES, $0.0001 PAR VALUE, OF

**THIRD HARMONIC BIO, INC.**

*transferable on the books of the Corporation by the holder hereof in person or by Attorney upon surrender of this certificate properly endorsed. This certificate is not valid until countersigned and registered by the Transfer Agent and Registrar.*

*IN WITNESS WHEREOF, the said Corporation has caused this certificate to be signed by facsimile signatures of its duly authorized officers.*

*Dated:*

COUNTERSIGNED AND REGISTERED:
**AMERICAN STOCK TRANSFER & TRUST COMPANY**
(Brooklyn, New York)
TRANSFER AGENT AND REGISTRAR

BY
AUTHORIZED SIGNATURE

CHIEF EXECUTIVE OFFICER

CHIEF FINANCIAL OFFICER

**Exhibit 5.1**

FENWICK

801 California Street
Mountain View, CA 94041

650.988.8500
Fenwick.com

September 8, 2022

Third Harmonic Bio, Inc.
300 Technology Square, 8th Floor
Cambridge, Massachusetts 02139

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-1 (File Number 333-267022) (the "***Registration Statement***") initially filed by Third Harmonic Bio, Inc., a Delaware corporation (the "***Company***"), with the Securities and Exchange Commission (the "***Commission***") on or about August 23, 2022, as subsequently amended on September 8, 2022, in connection with the registration under the Securities Act of 1933, as amended ("***Securities Act***"), of an aggregate of 10,350,000 shares of the Company's common stock, par value $0.0001 per share (the "***Stock***").

In connection with our opinion expressed below we have examined originals or copies of the underwriting agreement pursuant to which the Stock will be sold to the underwriters, the Registration Statement, the prospectus prepared in connection with the Registration Statement (the "***Prospectus***"), the Company's restated certificate of incorporation, as amended and restated (the "***Certificate of Incorporation***"), and the Company's bylaws (the "***Bylaws***"), certain minutes and consents of the Company's board of directors (the "***Board***") or a committee or committees thereof and the Company's stockholders relating to the Registration Statement, the Certificate of Incorporation and the Bylaws, and such other agreements, documents, certificates and statements of the Company, its transfer agent and public or government officials, as we have deemed advisable, and have examined such questions of law as we have considered necessary. In giving our opinion, we have also relied upon a good standing certificate regarding the Company issued by the Delaware Secretary of State and a management certificate addressed to us and dated of even date herewith executed by the Company containing certain factual representations by the Company.

In our examination of documents for purposes of this opinion, we have assumed, and express no opinion as to, the genuineness of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, the conformity to originals and completeness of all documents submitted to us as copies, the legal capacity of all persons or entities executing the same (other than the Company), the lack of any undisclosed termination, modification, waiver or amendment to any document reviewed by us.

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of the laws of any jurisdiction other than, the existing Delaware General Corporation Law.

In connection with our opinion expressed below, we have assumed that, at or prior to the time of the delivery of any shares of Stock, the Registration Statement will have been declared effective under the Securities Act that the registration will apply to the offer and sale of such shares of Stock and will not have been modified or rescinded and that there will not have occurred any change in law affecting the validity of the issuance of such shares of Stock.

Based upon the foregoing, we are of the opinion that the up 10,350,000 shares of Stock that may be issued and sold by the Company, when issued, sold and delivered in the manner and for the consideration stated in the Registration Statement and the Prospectus and in accordance with the resolutions adopted by the Board and to be adopted by the Pricing Committee of the Board, will be validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us, if any, in the Registration Statement, the Prospectus constituting a part thereof and any amendments thereto.

This opinion is intended solely for use in connection with issuance and sale of shares of Stock subject to the Registration Statement and is not to be relied upon for any other purpose. This opinion is rendered as of the date first written above and is based solely on our understanding of facts in existence as of such date after the aforementioned examination. In rendering the opinions above, we are opining only as to the specific legal issues expressly set forth therein, and no opinion shall be inferred as to any other matter or matters. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very truly yours,

*/s/ Fenwick & West LLP*

**FENWICK & WEST LLP**

**Exhibit 10.1**

FORM OF INDEMNITY AGREEMENT

This Indemnity Agreement, dated as of _____, 2022 is made by and between Third Harmonic Bio, Inc., a Delaware corporation (the "***Company***"), and _____, a director, officer or key employee of the Company or one of the Company's Subsidiaries or Affiliates (as those terms are defined below) or other service provider who satisfies the definition of Indemnifiable Person set forth below ("***Indemnitee***").

RECITALS

A. The Company is aware that competent and experienced persons are increasingly reluctant to serve as representatives of corporations unless they are protected by comprehensive liability insurance and indemnification, due to increased exposure to litigation costs and risks resulting from their service to such corporations, and due to the fact that the exposure frequently bears no relationship to the compensation of such representatives;

B. The members of the Board of Directors of the Company (the "***Board***") have concluded that to retain and attract talented and experienced individuals to serve as representatives of the Company and its Subsidiaries and Affiliates and to encourage such individuals to take the business risks necessary for the success of the Company and its Subsidiaries and Affiliates, it is necessary for the Company to contractually indemnify certain of its representatives and the representatives of its Subsidiaries and Affiliates, and to assume for itself maximum liability for Expenses and Other Liabilities (as those terms are defined below) in connection with claims against such representatives in connection with their service to the Company and its Subsidiaries and Affiliates;

C. Section 145 of the Delaware General Corporation Law ("***Section 145***"), empowers the Company to indemnify by agreement its officers, directors, employees and agents, and persons who serve, at the request of the Company, as directors, officers, employees or agents of other corporations, partnerships, joint ventures, trusts or other enterprises. The Restated Bylaws of the Company (the "***Bylaws***") require indemnification of the directors and officers of the Company subject to specific terms and conditions. Indemnitee may also be entitled to indemnification pursuant to Section 145. The Bylaws and Section 145 expressly provide that the indemnification pursuant thereto is not exclusive and contemplate that contracts may be entered into between the Company and members of the Board, officers, and other persons with respect to indemnification;

D. This Agreement is a supplement to and in furtherance of the Bylaws and any resolutions adopted pursuant thereto, as well as any rights of Indemnitees under the Delaware General Corporation Law (the "***DGCL***") or any directors and officers liability insurance policy or other applicable insurance policies, and this Agreement shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

E. The Company desires and has requested Indemnitee to serve or continue to serve as a representative of the Company and/or the Subsidiaries or Affiliates of the Company free from undue concern about inappropriate claims for damages arising out of or related to such services to the Company and/or the Subsidiaries or Affiliates of the Company.

AGREEMENT

NOW, THEREFORE, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) Affiliate. For purposes of this Agreement, "Affiliate" of the Company means any corporation, partnership, limited liability company, joint venture, trust or other enterprise or non-profit entity in respect of which Indemnitee is or was or will be serving as a director, officer, trustee, manager, member, partner, employee, agent, attorney, consultant, member of the entity's governing body (whether constituted as a board of directors, board of managers, general partner or otherwise), fiduciary, or in any other similar capacity at the request, election or direction of the Company, and including, but not limited to, any employee benefit plan of the Company or a Subsidiary or Affiliate of the Company.

(b) Change in Control. For purposes of this Agreement, "***Change in Control***" means any event or circumstance where (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***")), other than a Subsidiary or a trustee or other fiduciary holding securities under an employee benefit plan of the Company or Subsidiary, is or becomes the "Beneficial Owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding capital stock, (ii) during any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(b)(i), 1(b)(iii) or 1(b)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority of the Board, (iii) the stockholders of the Company approve a merger or consolidation of the Company with any other corporation, other than a merger or consolidation that would result in the outstanding capital stock of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into capital stock of the surviving entity) at least 50% of the total voting power represented by the capital stock of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iv) the stockholders of the Company approve a plan of liquidation of the Company or an agreement for the sale or disposition by the Company (in one transaction or a series of transactions) of all or substantially all of the Company's assets.

(c) Expenses. For purposes of this Agreement, "***Expenses***" means all reasonable and reasonably documented direct and indirect costs of any type or nature whatsoever (including, without limitation, all attorneys' fees and related disbursements, and other out-of-pocket costs) actually paid or incurred by Indemnitee in connection with the investigation, defense or appeal of, or being a witness or otherwise involved in (i) a Proceeding (as defined below), or establishing or enforcing a right to indemnification under this Agreement, Section 145 or otherwise; provided, however, that Expenses shall not include any judgments, fines, taxes (including ERISA or other benefit plan related excise taxes or penalties) or amounts paid in settlement of a Proceeding; (ii) any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond, or other appeal bond or its equivalent; or (iii) recovery under any directors and officers liability insurance policies or other applicable insurance policies maintained by the Company, regardless of whether Indemnitee is ultimately determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(d) Indemnifiable Event. For purposes of this Agreement, "***Indemnifiable Event***" means any event or occurrence related to Indemnitee's service for the Company or any Subsidiary or Affiliate as an Indemnifiable Person (as defined below), or by reason of anything done or not done, or any act or omission, by Indemnitee in any such capacity.

(e) Indemnifiable Person. For the purposes of this Agreement, "***Indemnifiable Person***" means any person who is or was a director, officer, trustee, manager, member, partner, employee, attorney, consultant, member of an entity's governing body (whether constituted as a board of directors, board of managers, general partner or otherwise) or other agent or fiduciary of the Company or a Subsidiary or Affiliate of the Company.

(f) Independent Counsel. For purposes of this Agreement, "***Independent Counsel***" means legal counsel (i) who has not performed services for the Company or Indemnitee in the five years preceding the time in question and who would not, under applicable standards of professional conduct, have a conflict of interest in representing either the Company or Indemnitee, and (ii) is selected by Indemnitee and approved by the Board, which approval may not be unreasonably withheld, delayed or conditioned.

(g) Independent Director. For purposes of this Agreement, "***Independent Director***" means a member of the Board who is not a party to the Proceeding for which a claim for advancement or indemnification is made under this Agreement.

(h) Other Liabilities. For purposes of this Agreement, "***Other Liabilities***" means any and all liabilities of any type whatsoever, including, but not limited to, judgments, fines, penalties, taxes (including excise taxes or penalties related to ERISA or other benefit plans), and amounts paid in settlement, and all interest, taxes, assessments and other charges paid or payable in connection with or in respect of any such judgments, fines, or penalties or amounts paid in settlement.

(i) Proceeding. For the purposes of this Agreement, "***Proceeding***" means any threatened, pending, or completed action, suit, claim or other proceeding, whether civil, criminal, administrative, investigative, legislative or any other type whatsoever, preliminary, informal or formal, including any arbitration or other alternative dispute resolution and including any appeal of any of the foregoing.

(j) Subsidiary. For purposes of this Agreement, "***Subsidiary***" means any entity of which more than 50% of the outstanding voting securities is owned directly or indirectly by the Company.

2. Agreement to Serve. The Indemnitee agrees to serve and/or continue to serve as an Indemnifiable Person in the capacity or capacities in which Indemnitee currently serves the Company as an Indemnifiable Person, and any additional capacity or capacities in which Indemnitee may agree to serve, until such time as Indemnitee's service in a particular capacity shall end according to the terms of an agreement, the Company's Restated Certificate of Incorporation (the "***Certificate of Incorporation***") or Bylaws, governing law, or otherwise. Nothing contained in this Agreement is intended to create any right to continued employment or other form of service for the Company or a Subsidiary or Affiliate of the Company by Indemnitee.

3. Mandatory Indemnification.

(a) Agreement to Indemnify. In the event Indemnitee is a person who was or is a party to or witness in or is threatened to be made a party to or witness in any Proceeding by reason of an Indemnifiable Event, the Company shall indemnify Indemnitee from and against any and all Expenses and Other Liabilities incurred by Indemnitee in connection with (including in preparation for) such Proceeding to the fullest extent permitted by the DGCL, as the same may be amended from time to time (but only to the extent that such amendment permits the Company to provide broader indemnification rights than the DGCL permitted prior to the adoption of such amendment), provided that such indemnification is subject to the exclusions set forth in Section 9 below. The parties hereto intend that this Agreement shall provide to the fullest extent permitted by law for indemnification in excess of that expressly permitted by statute, including, without limitation, any indemnification provided by the Certificate of Incorporation, the Bylaws, vote of the Company's stockholders or disinterested directors or applicable law.

(b) Company Obligations Primary. The Company hereby acknowledges that Indemnitee may have rights to advancement and/or indemnification for Expenses and Other Liabilities provided by a venture capital firm or other sponsoring organization ("***Other Indemnitor***"). The Company agrees with Indemnitee that the Company is the indemnitor of first resort of Indemnitee with respect to matters for which advancement and/or indemnification is provided under this Agreement and that the Company will be obligated to make all payments due to or for the benefit of Indemnitee under this Agreement without regard to any rights that Indemnitee may have against the Other Indemnitor. To the extent not in contravention of any insurance policy purchased by the Company, Subsidiary or Affiliate, the Company hereby waives any equitable rights to contribution or indemnification from the Other Indemnitor in respect of any amounts paid to Indemnitee hereunder. The Company further agrees that no

reimbursement of Other Liabilities or payment of Expenses by the Other Indemnitor to or for the benefit of Indemnitee shall affect the obligations of the Company hereunder, and that the Company shall be obligated to repay the Other Indemnitor for all amounts so paid or reimbursed to the extent that the Company has an obligation to pay Indemnitee for such Expenses or Other Liabilities hereunder.

4. Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any Expenses or Other Liabilities but not entitled, however, to indemnification for the total amount of such Expenses or Other Liabilities, the Company shall nevertheless indemnify Indemnitee for such total amount except as to the portion thereof for which indemnification is prohibited by this Agreement or the DGCL. In any review, process and/or Proceeding to determine the extent of indemnification to which Indemnitee is entitled, the Company shall bear the burden to establish, by clear and convincing evidence, the lack of a successful resolution of a particular claim, issue or matter and which amounts sought in indemnity are allocable to claims, issues or matters that were not successfully resolved.

5. Liability Insurance. So long as Indemnitee shall continue to serve the Company or a Subsidiary or Affiliate of the Company as an Indemnifiable Person and thereafter so long as Indemnitee shall be subject to any possible claim or threatened, pending or completed Proceeding as a result of an Indemnifiable Event, the Company shall use reasonable efforts to maintain in full force and effect for the benefit of Indemnitee as an insured (i) directors and officers liability insurance issued by one or more reputable insurers and having the policy amount and deductible deemed appropriate by the Board and providing in all respects coverage at least comparable to and in the same amount as that provided to the Chairman of the Board or the Chief Executive Officer of the Company, and (ii) any renewal, replacement or substitute directors and officers liability insurance policies issued by one or more reputable insurers providing in all respects coverage at least comparable to and in the same amount as that being provided to the Chairman of the Board or the Chief Executive Officer of the Company. The purchase, establishment and maintenance of any such insurance or other arrangements shall not in any way limit or affect the rights and obligations of the Company or of Indemnitee under this Agreement except as expressly provided herein, and the execution and delivery of this Agreement by the Company and Indemnitee shall not in any way limit or affect the rights and obligations of the Company or the other party or parties thereto under any such insurance or other arrangement. In the event of a Change in Control subsequent to the date of this Agreement, or the Company's becoming insolvent (including but not limited to being placed into receivership, an assignment for the benefit of creditors, or entering the federal bankruptcy process), the Company shall use reasonable efforts to maintain in force any and all insurance policies then maintained by the Company for the purpose of providing coverage to the Company's officers or directors (including but not limited to directors and officers liability, fiduciary and employment practices insurance) for a fixed period of no less than six years thereafter. Such coverage shall be non-cancelable and shall be placed and serviced by the Company's incumbent insurance broker or a broker selected by a majority of the non-management members of the Board.

6. Mandatory Advancement of Expenses. If requested by Indemnitee, the Company shall advance, to the fullest extent permitted by law, prior to the final disposition of the Proceeding, all Expenses incurred by Indemnitee in connection with (including in preparation for) a Proceeding not initiated by Indemnitee (and any Proceeding initiated by Indemnitee to the extent such Proceeding is initiated by Indemnitee in accordance with clauses (i)-(iii) of Section 9(a) of this Agreement) related to an Indemnifiable Event within (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee. The right to advances under this Section shall in all events continue until final disposition of any Proceeding, including any appeal therefrom and/or a final adjudication not subject to further appeal. Indemnitee hereby undertakes to repay such amounts advanced if, and only if and to the extent that, it shall ultimately be determined that Indemnitee is not entitled to be indemnified by the Company and no additional form of undertaking with respect to such obligation to repay shall be required. Indemnitee's undertaking to repay any Expenses advanced to Indemnitee hereunder shall be unsecured and shall not be subject to the accrual or payment of any interest thereon. This Section 6 shall not apply to any request for advancement of Expenses made by Indemnitee for which such advancement of Expenses is excluded pursuant to Section 9 of this Agreement.

7. Notice and Other Indemnification Procedures.

(a) Notification. Promptly after receipt by Indemnitee of notice of the commencement of or the threat of commencement of any Proceeding, unless the Company is a named co-defendant with Indemnitee (or the Company is the recipient of such threat), Indemnitee shall, if Indemnitee believes the advancement of Expenses or the indemnification of Other Liabilities with respect thereto may be sought from the Company under this Agreement, notify the Company in writing of the commencement or threat of commencement thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of and facts related to the Proceeding. However, a failure by Indemnitee to notify the Company promptly following Indemnitee's receipt of such notice shall not relieve the Company from any liability that it may have to Indemnitee except to the extent that the Company is materially prejudiced in its defense of such Proceeding as a result of such failure, provided, however, that the Company shall have the burden to prove the existence of such material prejudice by clear and convincing evidence.

(b) Insurance Notice and Other Matters. If, at the time of the receipt of a notice of the commencement of a Proceeding pursuant to Section 7(a) above, the Company has director and officer liability insurance and/or any other type of insurance that might provide coverage to Indemnitee in effect, the Company shall give prompt notice of the commencement of such Proceeding on behalf of Indemnitee to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all commercially reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such insurance policies. In addition, the Company will instruct the insurers and the Company's insurance broker that they may communicate directly with Indemnitee regarding such Proceeding.

(c) Assumption of Defense. In the event the Company shall be obligated to advance Expenses for any Proceeding against Indemnitee, the Company, if deemed appropriate by the Company, shall be entitled to assume the defense of such Proceeding as provided herein. Such defense by the Company may include the representation of two or more parties by one attorney or law firm as permitted under the ethical rules and legal requirements related to joint representations. Following delivery of written notice to Indemnitee of the Company's election to assume the defense of such Proceeding, the approval by Indemnitee (which approval shall not be unreasonably withheld, delayed or conditioned) of counsel designated by the Company, and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees and expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. If (i) the employment of separate counsel by Indemnitee has been previously authorized by the Company, (ii) Indemnitee shall have notified the Board in writing that Indemnitee or separate counsel for Indemnitee has reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense, (iii) the Company fails to employ counsel to assume the defense of such Proceeding, or (iv) after a Change in Control, the employment of counsel by Indemnitee has been approved by Independent Counsel, the Expenses related to work conducted by Indemnitee's counsel shall be subject to indemnification and/or advancement pursuant to the terms of this Agreement. Indemnitee agrees that any such separate counsel retained by Indemnitee will be a member of any approved list of panel counsel under the Company's applicable insurance policies, should the applicable policies provide for a panel of approved counsel. Nothing herein shall prevent Indemnitee from employing counsel for any Proceeding at Indemnitee's own expense.

(d) Settlement. The Company shall not be liable to indemnify Indemnitee under this Agreement or otherwise for any amounts paid in settlement of any Proceeding effected without the Company's written consent; provided, however, that if a Change in Control has occurred subsequent to the date of this Agreement, the Company shall be liable for indemnification of Indemnitee for amounts paid in settlement if Independent Counsel has approved the settlement. Neither the Company nor any Subsidiary or Affiliate shall enter into a settlement of any Proceeding that might result in the imposition of any Expense, Other Liability, penalty, limitation or detriment on Indemnitee, whether indemnifiable under this Agreement or otherwise, without Indemnitee's written consent. Neither the Company nor Indemnitee shall unreasonably withhold, delay or condition consent from any settlement of any Proceeding. The Company shall promptly notify Indemnitee upon the Company's receipt of an offer to settle, or if the Company makes an offer to settle, any Proceeding, and provide Indemnitee with a reasonable amount of time to consider such settlement, in the case of any such settlement for which the consent of Indemnitee would be required hereunder. The Company shall not settle any part of any Proceeding to which Indemnitee is a party with respect to other parties (including the Company) without the written consent of Indemnitee if any portion of the settlement is to be funded from insurance proceeds paid from an insurance policy or policies providing coverage to Indemnitee unless approved by a majority of the Independent Directors, provided that this sentence shall cease to be of any force and effect if it has been determined in accordance with this Agreement that Indemnitee is not entitled to indemnification hereunder with respect to such Proceeding or if the Company's obligations hereunder to Indemnitee with respect to such Proceeding have been fully discharged.

8. Determination of Right to Indemnification.

(a) Success on the Merits or Otherwise. To the extent that Indemnitee has been successful on the merits or otherwise in the defense of any Proceeding referred to in Section 3(a) above or in the defense of any claim, issue or matter described therein, the Company shall indemnify Indemnitee against Expenses incurred in connection therewith.

(b) Indemnification in Other Situations. In the event that Section 8(a) is inapplicable, the Company shall also indemnify Indemnitee if Indemnitee has met the applicable standard of conduct for indemnification to the fullest extent permitted by law.

(c) Determination of Entitlement to Indemnification. Indemnitee shall be entitled to select the manner in which the determination of whether or not Indemnitee has met the applicable standard of conduct shall be decided, and such election will be made from among the following:

i. A majority of the Independent Directors even though less than a quorum;

ii. A committee of Independent Directors designated by a majority vote of Independent Directors, even though less than a quorum; or

iii. Independent Counsel, who shall make such determination in a written opinion.

If Indemnitee is an officer or a director of the Company at the time that Indemnitee is selecting the manner in which the determination of whether Indemnitee has met the applicable standard of conduct shall be decided, then Indemnitee shall not select Independent Counsel as the manner for the determination to be made unless (i) there are no Independent Directors, or (ii) a majority of the Independent Directors (even though less than a quorum) approve of the selection of Independent Counsel, which approval may not be unreasonably withheld, delayed or conditioned.

The party or parties selected in accordance with this Section 8(c) shall be referred to herein as the "***Reviewing Party***." Notwithstanding the foregoing, following any Change in Control subsequent to the date of this Agreement, the Reviewing Party shall be Independent Counsel.

(d) Decision Timing. As soon as practicable, and in no event later than thirty (30) days after receipt by the Company of written notice of Indemnitee's choice of the Reviewing Party pursuant to Section 8(c) above, the Company and Indemnitee shall each submit to the Reviewing Party such information as they believe is appropriate for the Reviewing Party to consider. The Reviewing Party shall arrive at its decision within a reasonable period of time following the receipt of all such information from the Company and Indemnitee, but in no event later than thirty (30) days following the receipt of all such information, provided that the time by which the Reviewing Party must reach a decision may be extended by mutual agreement of the Company and Indemnitee. All Expenses associated with the process set forth in this Section 8(d), including but not limited to the Expenses of the Reviewing Party, shall be paid by the Company.

(e) Delaware Court of Chancery. Notwithstanding a final determination by any Reviewing Party that Indemnitee is not entitled to indemnification with respect to a specific Proceeding, Indemnitee shall have the right to apply to the Delaware Court of Chancery, for the purpose of enforcing Indemnitee's right to indemnification pursuant to this Agreement.

(f) Expenses. The Company shall indemnify Indemnitee against all Expenses incurred by Indemnitee in connection with any process, hearing or Proceeding under this Section 8 involving Indemnitee and against all Expenses incurred by Indemnitee in connection with any other Proceeding between the Company and Indemnitee involving the interpretation or enforcement of the rights of Indemnitee under this Agreement unless a court of competent jurisdiction finds that each of the material claims of Indemnitee in any such Proceeding was frivolous or made in bad faith.

(g) Determination of "Good Faith". For purposes of any determination of whether Indemnitee acted in "good faith" or acted in "bad faith," Indemnitee shall be deemed to have acted in good faith or not acted in bad faith if, in taking or failing to take the action in question, Indemnitee relied on the records or books of account of the Company or a Subsidiary or Affiliate, including financial statements, or on information, opinions, reports or statements provided to Indemnitee by the officers or other employees of the Company or a Subsidiary or Affiliate in the course of their duties, or on the advice of legal counsel for the Company or a Subsidiary or Affiliate, or on information or records given or reports made to the Company or a Subsidiary or Affiliate by an independent certified public accountant or by an appraiser or other expert selected by the Company or a Subsidiary or Affiliate, or by any other person (including legal counsel, accountants and financial advisors) as to matters Indemnitee reasonably believes are within such other person's professional or expert competence and who has or have been selected with reasonable care by or on behalf of the Company or a Subsidiary or Affiliate. In connection with any determination as to whether Indemnitee is entitled to be indemnified hereunder, the Reviewing Party or court shall presume that Indemnitee has satisfied the applicable standard of conduct and is entitled to indemnification, and the burden of proof shall be on the Company to establish, by clear and convincing evidence, that Indemnitee is not so entitled. The provisions of this Section 8(g) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement. In addition, the knowledge and/or actions, or failures to act, of any other person serving the Company or a Subsidiary or Affiliate as an Indemnifiable Person shall not be imputed to Indemnitee for purposes of determining the right to indemnification hereunder.

9. Exceptions. Any other provision herein to the contrary notwithstanding, Indemnitee's rights to indemnification and/or advancement are subject to the following exceptions.

(a) Claims Initiated by Indemnitee. The Company shall not be obligated pursuant to the terms of this Agreement to indemnify or advance Expenses to Indemnitee with respect to Proceedings or claims initiated or brought voluntarily by Indemnitee and not by way of defense, except (i) with respect to Proceedings brought to establish or enforce a right to indemnification under this Agreement, any other statute or law, as permitted under Section 145, or otherwise, (ii) where the Board has consented to the initiation of such Proceeding, or (iii) with respect to Proceedings brought to discharge Indemnitee's fiduciary responsibilities, whether under ERISA or otherwise, but such indemnification or advancement of Expenses may be provided by the Company in specific cases if the Board finds it to be appropriate.

(b) Actions Based on Federal Statutes Regarding Profit Recovery and Return of Bonus Payments. The Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee on account of (i) any suit in which judgment is rendered against Indemnitee by a court of competent jurisdiction in a final adjudication not subject to further appeal for an accounting of profits made from the purchase or sale by Indemnitee of securities of the Company pursuant to the provisions of Section 16(b) of the Exchange Act and amendments thereto or similar provisions of any federal, state or local statutory law, (ii) any reimbursement paid to the Company by the Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by the Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act, including but not limited to any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "***Sarbanes-Oxley Act***"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act; or (iii) any reimbursement of the Company by Indemnitee of any compensation pursuant to any compensation recoupment or clawback policy adopted by the Board or the compensation committee of the Board, including but not limited to any such policy adopted to comply with stock exchange listing requirements implementing Section 10D of the Exchange Act.

(c) Unlawful Indemnification. The Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee for Other Liabilities if such indemnification is prohibited by law as determined by a court of competent jurisdiction in a final adjudication not subject to further appeal.

(d) Exception for Amounts Covered by Insurance and Other Sources. The Company shall not be obligated to advance or indemnify Indemnitee for Expenses or Other Liabilities of any type whatsoever, including, but not limited to judgments, fines, penalties, taxes (including excise taxes or penalties related to ERISA or other benefit plans) and amounts paid in settlement, to the extent such have been paid directly to Indemnitee (or paid directly to a third party on Indemnitee's behalf) by any directors and officers liability insurance or other type of insurance maintained by the Company; provided, however, that payment made to Indemnitee pursuant to an insurance policy purchased and maintained by Indemnitee at his or her own expense of any amounts otherwise indemnifiable or obligated to be made pursuant to this Agreement shall not reduce the Company's obligations to Indemnitee pursuant to this Agreement.

10. Non-exclusivity. The provisions for advancement of Expenses and indemnification of Other Liabilities set forth in this Agreement shall not be deemed exclusive of any other rights that Indemnitee may have under any provision of law, the Certificate of Incorporation or the Bylaws, the vote of the Company's stockholders or disinterested directors, other agreements, or otherwise, both as to acts or omissions in his or her official capacity and to acts or omissions in another capacity while serving the Company or a Subsidiary or Affiliate as an Indemnifiable Person.

11. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (i) the validity, legality and enforceability of the remaining provisions of the Agreement (including, without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby, and (ii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

12. Entire Agreement; Supersession, Modification and Waiver. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes any prior indemnification agreement between the Indemnitee and the Company, its Subsidiaries or its Affiliates, provided, however, that this Agreement is a supplement to and in furtherance of Section 145, the Certificate of Incorporation, the Bylaws, any directors and officers liability insurance or other insurance policy providing coverage to Indemnitee maintained by the Company and applicable law, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder. If the Company and Indemnitee have previously entered into an indemnification agreement providing for the indemnification of Indemnitee by the Company, the entry into this Agreement by both parties hereto shall be deemed to amend and restate such prior agreement to read in its entirety as, and be superseded by, this Agreement. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar) and except as expressly provided herein, no such waiver shall constitute a continuing waiver.

13. Successors and Assigns; Survival of Rights. The terms of this Agreement shall bind, and shall inure to the benefit of, and be enforceable by the parties hereto and, as applicable, their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business and/or assets of the Company), assigns, spouses, heirs, executors, administrators and personal and legal representatives (collectively, "***Successors***"). Indemnitee's rights hereunder shall continue after Indemnitee has ceased serving the Company or a Subsidiary or Affiliate as an Indemnifiable Person and shall inure to the benefit of Indemnitee's Successors. In addition, the Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all, or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement and indemnify Indemnitee to the fullest extent permitted by law.

14. Notice. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed duly given (i) if delivered by hand and a receipt is provided by the party to whom such communication is delivered, (ii) if mailed by certified or registered mail with postage prepaid, return receipt requested, on the signing by the recipient of an acknowledgement of receipt form accompanying delivery through the U.S. mail,

(iii) by personal service by a process server, (iv) by delivery to the recipient's address by overnight delivery (*e.g.*, FedEx, UPS or DHL) or other commercial delivery service, or (v) if via electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day. The address for notice to the Indemnitee shall be the Indemnitee's most recent address on file with the Company. Delivery of communications to the Company with respect to this Agreement shall be sent to the attention of the Company's Chief Executive Officer or Chief Financial Officer.

15. No Presumptions. For purposes of this Agreement, the termination of any Proceeding, by judgment, order, settlement (whether with or without court approval) or conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law or otherwise. In addition, neither the failure of the Company or a Reviewing Party to have made a determination as to whether Indemnitee has met any particular standard of conduct or had any particular belief, nor an actual determination by the Company or a Reviewing Party that Indemnitee has not met such standard of conduct or did not have such belief, prior to the commencement of Proceedings by Indemnitee to secure a judicial determination by exercising Indemnitee's rights under Section 8(e) of this Agreement shall be a defense to Indemnitee's claim or create a presumption that Indemnitee has failed to meet any particular standard of conduct or did not have any particular belief or is not entitled to indemnification under applicable law or otherwise. Additionally, any admission of liability by the Company in connection with any settlement by the Company with a regulatory agency shall not, of itself, create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law or otherwise.

16. Subrogation and Contribution.

(a) Except as otherwise expressly provided in this Agreement, in the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the Company effectively to bring suit to enforce such rights.

(b) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by or on behalf of Indemnitee, whether for Expenses or Other Liabilities, in connection with any Proceeding relating to an Indemnifiable Event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

17. Specific Performance, Etc. The parties recognize that if any provision of this Agreement is violated by the Company, Indemnitee may be without an adequate remedy at law. Accordingly, in the event of any such violation, Indemnitee shall be entitled, if Indemnitee so elects, to institute Proceedings, either in law or at equity, to obtain damages, to enforce specific performance, to enjoin such violation, or to obtain any relief or any combination of the foregoing as Indemnitee may elect to pursue.

18. Counterparts. This Agreement may be executed in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement. Execution of a PDF copy shall have the same force and effect as execution of an original, and a copy of a signature will be admissible in any legal proceeding as if an original.

19. Headings. The headings of the sections and paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction or interpretation thereof.

20. Governing Law. This Agreement shall be governed exclusively by and construed according to the laws of the State of Delaware, as applied to contracts between Delaware residents entered into and to be performed entirely with Delaware.

21. Consent to Jurisdiction. The Company and Indemnitee each hereby irrevocably consent to the jurisdiction of the courts of the State of Delaware for all purposes in connection with any Proceeding which arises out of or relates to this Agreement.

[*Signature Page Follows*]

The parties hereto have entered into this Agreement effective as of the date first above written.

THIRD HARMONIC BIO, INC.

By: _____

Its: _____

INDEMNITEE

_____

[INDEMNITEE'S NAME]

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**

**1. PURPOSE. The purpose of this Plan is to provide incentives to attract, retain, and motivate eligible persons whose present and potential contributions are important to the success of the Company, and any Parents, Subsidiaries, and Affiliates that exist now or in the future, by offering them an opportunity to participate in the Company's future performance through the grant of Awards. Capitalized terms not defined elsewhere in the text are defined in Section 28.**

**2. SHARES SUBJECT TO THE PLAN**.

**2.1.** Number of Shares Available. Subject to Sections 2.6 and 21 and any other applicable provisions hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan as of the date of adoption of the Plan by the Board, is 4,426,737 Shares, plus (a) any reserved Shares not issued or subject to outstanding awards granted under the Company's Stock Incentive Plan, as amended (the "***Prior Plan***") on the Effective Date, (b) Shares that are subject to outstanding awards granted under the Prior Plan that cease to be subject to such awards by forfeiture or otherwise after the Effective Date, (c) Shares issued under the Prior Plan that are repurchased by the Company at the original issue price, (d) Shares issued under the Prior Plan, before or after the Effective Date pursuant to the exercise of stock-options that are, after the Effective Date, forfeited and (e) Shares that are subject to outstanding awards granted under the Prior Plan that are used to pay the exercise price of an option or withheld to satisfy any tax withholding obligations related to any award.

**2.2.** Lapsed, Returned Awards. Shares subject to Awards, and Shares issued under the Plan under any Award, will again be available for grant and issuance in connection with subsequent Awards under this Plan to the extent such Shares: (a) are subject to issuance upon exercise of an Option or SAR granted under this Plan but which cease to be subject to the Option or SAR for any reason other than exercise of the Option or SAR, (b) are subject to Awards granted under this Plan that are forfeited or are repurchased by the Company at the original issue price, (c) are subject to Awards granted under this Plan that otherwise terminate without such Shares being issued or (d) are surrendered pursuant to an Exchange Program. To the extent an Award under the Plan is paid out in cash or other property rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Shares used to pay the exercise price of an Award or withheld to satisfy the tax withholding obligations related to an Award will become available for grant and issuance in connection with subsequent Awards under this Plan. For the avoidance of doubt, Shares that otherwise become available for grant and issuance because of the provisions of this Section 2.2 will not include Shares subject to Awards that initially became available because of the substitution clause in Section 21.2 hereof.

**2.3.** Minimum Share Reserve. At all times the Company will reserve and keep available a sufficient number of Shares as will be required to satisfy the requirements of all outstanding Awards granted under this Plan.

**2.4.** Automatic Share Reserve Increase. The number of Shares available for grant and issuance under the Plan will be increased on January 1st of each of 2023 through 2032, by the lesser of (a) five percent (5%) of the sum of (i) the number of shares of all classes of the Company's common stock, plus (ii) the total number of shares of Company common stock issuable upon conversion of any preferred stock or exercise of any Pre-Funded Warrants issued and outstanding on each December 31 immediately prior to the date of increase or (b) such number of Shares determined by the Board.

**2.5.** ISO Limitation. No more than 22,133,687 Shares will be issued pursuant to the exercise of ISOs granted under the Plan.

**2.6.** Adjustment of Shares. If the number or class of outstanding Shares is changed by a stock dividend, extraordinary dividend or distribution (whether in cash, shares, or other property, other than a regular cash dividend), recapitalization, stock split, reverse stock split, subdivision, combination, consolidation, reclassification, spin-off, or similar change in the capital structure of the Company, without consideration, then (a) the number and class of Shares reserved for issuance and future grant under the Plan set forth in Section 2.1, including Shares reserved under sub-clauses (a)-(c) of Section 2.1, (b) the Exercise Prices of and number and class of Shares subject to outstanding Options and SARs, (c) the number and class of Shares subject to other outstanding Awards and (d) the maximum number and class of Shares that may be issued as ISOs set forth in Section 2.5, will be proportionately adjusted, subject to any required action by the Board or the stockholders of the Company and in compliance with applicable securities or other laws, provided that fractions of a Share will not be issued.

If, by reason of an adjustment pursuant to this Section 2.6, a Participant's Award Agreement or other agreement related to any Award, or the Shares subject to such Award, covers additional or different shares of stock or securities, then such additional or different shares, and the Award Agreement or such other agreement in respect thereof, will be subject to all of the terms, conditions, and restrictions which were applicable to the Award or the Shares subject to such Award prior to such adjustment.

**3. ELIGIBILITY**. ISOs may be granted only to Employees. All other Awards may be granted to Employees, Consultants, Directors, and Non-Employee Directors, provided that such Consultants, Directors, and Non-Employee Directors render bona fide services not in connection with the offer and sale of securities in a capital-raising transaction.

**4. ADMINISTRATION**.

**4.1.** Committee Composition; Authority. This Plan will be administered by the Committee or by the Board acting as the Committee. Subject to the general purposes, terms, and conditions of this Plan, and to the direction of the Board, the Committee will have full power to implement and carry out this Plan, except, however, the Board will establish the terms for the grant of an Award to Non-Employee Directors. The Committee will have the authority to:

(a) construe and interpret this Plan, any Award Agreement, and any other agreement or document executed pursuant to this Plan;

(b) prescribe, amend, and rescind rules and regulations relating to this Plan or any Award;

(c) select persons to receive Awards;

(d) determine the form and terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the Exercise Price, the time or times when Awards may vest and be exercised (which may be based on performance criteria) or settled, any vesting acceleration or waiver of forfeiture restrictions, the method to satisfy tax withholding obligations or any other tax liability legally due, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Committee will determine;

(e) determine the number of Shares or other consideration subject to Awards;

(f) determine the Fair Market Value in good faith and interpret the applicable provisions of this Plan and the definition of Fair Market Value in connection with circumstances that impact the Fair Market Value, if necessary;

(g) determine whether Awards will be granted singly, in combination with, in tandem with, in replacement of, or as alternatives to, other Awards under this Plan or any other incentive or compensation plan of the Company or any Parent, Subsidiary, or Affiliate;

(h) grant waivers of Plan or Award conditions;

(i) determine the vesting, exercisability, and payment of Awards;

(j) correct any defect, supply any omission or reconcile any inconsistency in this Plan, any Award or any Award Agreement;

(k) determine whether an Award has been vested and/or earned;

(l) determine the terms and conditions of any, and to institute any Exchange Program;

(m) reduce, waive or modify any criteria with respect to Performance Factors;

(n) adjust Performance Factors to take into account changes in law and accounting or tax rules as the Committee deems necessary or appropriate to reflect the impact of extraordinary or unusual items, events, or circumstances to avoid windfalls or hardships;

(o) adopt terms and conditions, rules, and/or procedures (including the adoption of any subplan under this Plan) relating to the operation and administration of the Plan to accommodate requirements of local law and procedures outside of the United States or to qualify Awards for special tax treatment under laws of jurisdictions other than the United States;

(p) exercise discretion with respect to Performance Awards;

(q) make all other determinations necessary or advisable for the administration of this Plan; and

(r) delegate any of the foregoing to a subcommittee or to one or more executive officers pursuant to a specific delegation as permitted by applicable law, including Section 157(c) of the Delaware General Corporation Law.

**4.2.** Committee Interpretation and Discretion. Any determination made by the Committee with respect to any Award will be made in its sole discretion at the time of grant of the Award or, unless in contravention of any express term of the Plan or Award, at any later time, and such determination will be final and binding on the Company and all persons having an interest in any Award under the Plan. Any dispute regarding the interpretation of the Plan or any Award Agreement will be submitted by the Participant or Company to the Committee for review. The resolution of such a dispute by the Committee will be final and binding on the Company and the Participant. The Committee may delegate to one or more executive officers the authority to review and resolve disputes with respect to Awards held by Participants who are not Insiders, and such resolution will be final and binding on the Company and the Participant.

**4.3.** Section 16 of the Exchange Act. Awards granted to Participants who are subject to Section 16 of the Exchange Act must be approved by two or more "non-employee directors" (as defined in the regulations promulgated under Section 16 of the Exchange Act).

**4.4.** Documentation. The Award Agreement for a given Award, the Plan, and any other documents may be delivered to, and accepted by, a Participant or any other person in any manner (including electronic distribution or posting) that meets applicable legal requirements.

**4.5.** Foreign Award Recipients. Notwithstanding any provision of the Plan to the contrary, in order to comply with the laws and practices in other countries in which the Company, its Subsidiaries, and Affiliates operate or have Employees or other individuals eligible for Awards, the Committee, in its sole discretion, will have the power and authority to: (a) determine which Subsidiaries and Affiliates will be covered by the Plan; (b) determine which individuals outside the United States are eligible to participate in the Plan, which may include individuals who provide services to the Company, Subsidiary or Affiliate under an agreement with a foreign nation or agency; (c) modify the terms and conditions of any Award granted to individuals outside the United States or foreign nationals to comply with applicable foreign laws, policies, customs, and practices; (d) establish subplans and modify exercise procedures, vesting conditions, and other terms and procedures to the extent the Committee determines such actions to be necessary or advisable (and such subplans and/or modifications will be attached to this Plan as appendices, if necessary); and (e) take any action, before or after an Award is made, that the Committee determines to be necessary or advisable to obtain approval or comply with any local governmental regulatory exemptions or approvals, provided, however, that no action taken under this Section 4.5 will increase the Share limitations contained in Section 2.1 hereof. Notwithstanding the foregoing, the Committee may not take any actions hereunder, and no Awards will be granted, that would violate the Exchange Act or any other applicable United States securities law, the Code, or any other applicable United States governing statute or law.

**5. OPTIONS**. An Option is the right but not the obligation to purchase a Share, subject to certain conditions, if applicable. The Committee may grant Options to eligible Employees, Consultants, and Directors and will determine whether such Options will be Incentive Stock Options within the meaning of the Code ("***ISOs***") or Nonqualified Stock Options ("***NSOs***"), the number of Shares subject to the Option, the Exercise Price of the Option, the period during which the Option may vest and be exercised, and all other terms and conditions of the Option, subject to the following terms of this section.

**5.1.** Option Grant. Each Option granted under this Plan will identify the Option as an ISO or an NSO. An Option may be, but need not be, awarded upon satisfaction of such Performance Factors during any Performance Period as are set out in advance in the Participant's individual Award Agreement. If the Option is being earned upon the satisfaction of Performance Factors, then the Committee will: (a) determine the nature, length, and starting date of any Performance Period for each Option; and (b) select from among the Performance Factors to be used to measure the performance, if any. Performance Periods may overlap and Participants may participate simultaneously with respect to Options that are subject to different performance goals and other criteria.

**5.2.** Date of Grant. The date of grant of an Option will be the date on which the Committee makes the determination to grant such Option, or a specified future date. The Award Agreement will be delivered to the Participant within a reasonable time after the granting of the Option.

**5.3.** Exercise Period. Options may be vested and exercisable within the times or upon the conditions as set forth in the Award Agreement governing such Option, provided, however, that no Option will be exercisable after the expiration of ten (10) years from the date the Option is granted and provided further that no ISO granted to a person who, at the time the ISO is granted, directly or by attribution owns more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or

of any Parent or Subsidiary ("***Ten Percent Stockholder***") will be exercisable after the expiration of five (5) years from the date the ISO is granted. The Committee also may provide for Options to become exercisable at one time or from time to time, periodically or otherwise, in such number of Shares or percentage of Shares as the Committee determines.

**5.4.** Exercise Price. The Exercise Price of an Option will be determined by the Committee when the Option is granted, provided that: (a) the Exercise Price of an Option will be not less than one hundred percent (100%) of the Fair Market Value of the Shares on the date of grant, and (b) the Exercise Price of any ISO granted to a Ten Percent Stockholder will not be less than one hundred ten percent (110%) of the Fair Market Value of the Shares on the date of grant. Payment for the Shares purchased may be made in accordance with Section 11 and the Award Agreement and in accordance with any procedures established by the Company.

**5.5.** Method of Exercise. Any Option granted hereunder will be vested and exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Committee and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share. An Option will be deemed exercised when the Company receives: (a) notice of exercise (in such form as the Committee may specify from time to time) from the person entitled to exercise the Option (and/or via electronic execution through the authorized third-party administrator), and (b) full payment for the Shares with respect to which the Option is exercised (together with applicable withholding taxes). Full payment may consist of any consideration and method of payment authorized by the Committee and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 2.6 of the Plan. Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

**5.6.** Termination of Service. If the Participant's Service terminates for any reason except for Cause or the Participant's death or Disability, then the Participant may exercise such Participant's Options only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates no later than three (3) months after the date Participant's Service terminates (or such shorter or longer time period as may be determined by the Committee, with any exercise of an ISO beyond three (3) months after the date Participant's employment terminates deemed to be the exercise of an NSO), but in any event no later than the expiration date of the Options.

(a) Death. If the Participant's Service terminates because of the Participant's death (or the Participant dies within three (3) months after Participant's Service terminates other than for Cause or because of the Participant's Disability), then the Participant's Options may be exercised only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates and must be exercised by the Participant's legal representative, or authorized assignee, no later than twelve (12) months after the date Participant's Service terminates (or such shorter or longer time period as may be determined by the Committee), but in any event no later than the expiration date of the Options.

(b) Disability. If the Participant's Service terminates because of the Participant's Disability, then the Participant's Options may be exercised only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates and must be exercised by the Participant (or the Participant's legal representative or authorized assignee) no later than twelve (12)

months after the date Participant's Service terminates (or such shorter or longer time period as may be determined by the Committee, with any exercise beyond (a) three (3) months after the date Participant's employment terminates when the termination of Service is for a Disability that is not a "permanent and total disability" as defined in Section 22(e)(3) of the Code or (b) twelve (12) months after the date Participant's employment terminates when the termination of Service is for a Disability that is a "permanent and total disability" as defined in Section 22(e)(3) of the Code, deemed to be exercise of an NSO), but in any event no later than the expiration date of the Options.

(c) Cause. Unless otherwise determined by the Committee, if the Participant's Service terminates for Cause, then Participant's Options (whether or not vested) will expire on the date of termination of Participant's Service if the Committee has reasonably determined in good faith that such cessation of Services has resulted in connection with an act or failure to act constituting Cause (or such Participant's Services could have been terminated for Cause (without regard to the lapsing of any required notice or cure periods in connection therewith) at the time such Participant terminated Service), or at such later time and on such conditions as are determined by the Committee, but in any event no later than the expiration date of the Options. Unless otherwise provided in an employment agreement, Award Agreement, or other applicable agreement, Cause will have the meaning set forth in the Plan.

**5.7.** Limitations on ISOs. With respect to Awards granted as ISOs, to the extent that the aggregate Fair Market Value of the Shares with respect to which such ISOs are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars ($100,000), such Options will be treated as NSOs. For purposes of this Section 5.7, ISOs will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted. In the event that the Code or the regulations promulgated thereunder are amended after the Effective Date to provide for a different limit on the Fair Market Value of Shares permitted to be subject to ISOs, such different limit will be automatically incorporated herein and will apply to any Options granted after the effective date of such amendment.

**5.8.** Modification, Extension or Renewal. The Committee may modify, extend, or renew outstanding Options and authorize the grant of new Options in substitution therefor, provided that any such action may not, without the written consent of a Participant, impair any of such Participant's rights under any Option previously granted. Any outstanding ISO that is modified, extended, renewed, or otherwise altered will be treated in accordance with Section 424(h) of the Code. Subject to Section 18 of this Plan, by written notice to affected Participants, the Committee may reduce the Exercise Price of outstanding Options without the consent of such Participants, provided, however, that the Exercise Price may not be reduced below the Fair Market Value on the date the action is taken to reduce the Exercise Price.

**5.9.** No Disqualification. Notwithstanding any other provision in this Plan, no term of this Plan relating to ISOs will be interpreted, amended, or altered, nor will any discretion or authority granted under this Plan be exercised, so as to disqualify this Plan under Section 422 of the Code or, without the consent of the Participant affected, to disqualify any ISO under Section 422 of the Code.

**6. RESTRICTED STOCK UNITS**. A Restricted Stock Unit ("***RSU***") is an award to an eligible Employee, Consultant, or Director covering a number of Shares that may be settled by issuance of those Shares (which may consist of Restricted Stock) or in cash. All RSUs will be made pursuant to an Award Agreement.

**6.1.** Terms of RSUs. The Committee will determine the terms of an RSU including, without limitation: (a) the number of Shares subject to the RSU, (b) the time or times during which the RSU may be settled, (c) the consideration to be distributed on settlement, and (d) the effect of the Participant's termination of Service on each RSU, provided that no RSU will have a term longer than ten (10) years. An RSU may be awarded upon satisfaction of such performance goals based on Performance Factors during any Performance Period as are set out in advance in the Participant's Award Agreement. If the RSU is being earned upon satisfaction of Performance Factors, then the Committee will: (i) determine the nature, length, and starting date of any Performance Period for the RSU; (ii) select from among the Performance Factors to be used to measure the performance, if any; and (iii) determine the number of Shares deemed subject to the RSU. Performance Periods may overlap and Participants may participate simultaneously with respect to RSUs that are subject to different Performance Periods and different performance goals and other criteria.

**6.2.** Form and Timing of Settlement. Payment of earned RSUs will be made as soon as practicable after the date(s) determined by the Committee and set forth in the Award Agreement. The Committee, in its sole discretion, may settle earned RSUs in cash, Shares, or a combination of both. The Committee may also permit a Participant to defer payment under a RSU to a date or dates after the RSU is earned, provided that the terms of the RSU and any deferral satisfy the requirements of Section 409A of the Code to the extent applicable.

**6.3.** Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on such date Participant's Service terminates (unless determined otherwise by the Committee).

**7. RESTRICTED STOCK AWARDS**. A Restricted Stock Award is an offer by the Company to sell to an eligible Employee, Consultant, or Director Shares that are subject to restrictions ("***Restricted Stock***"). The Committee will determine to whom an offer will be made, the number of Shares the Participant may purchase, the Purchase Price, the restrictions under which the Shares will be subject, and all other terms and conditions of the Restricted Stock Award, subject to the Plan.

**7.1.** Restricted Stock Purchase Agreement. All purchases under a Restricted Stock Award will be evidenced by an Award Agreement. Except as may otherwise be provided in an Award Agreement, a Participant accepts a Restricted Stock Award by signing and delivering to the Company an Award Agreement with full payment of the Purchase Price, within thirty (30) days from the date the Award Agreement was delivered to the Participant. If the Participant does not accept such Award within thirty (30) days, then the offer to purchase such Restricted Stock Award will terminate, unless the Committee determines otherwise.

**7.2.** Purchase Price. The Purchase Price for Shares issued pursuant to a Restricted Stock Award will be determined by the Committee and may be less than Fair Market Value on the date the Restricted Stock Award is granted. Payment of the Purchase Price must be made in accordance with Section 11 of the Plan, and the Award Agreement and in accordance with any procedures established by the Company.

**7.3.** Terms of Restricted Stock Awards. Restricted Stock Awards will be subject to such restrictions as the Committee may impose or are required by law. These restrictions may be based on completion of a specified period of Service with the Company or upon completion of Performance Factors, if any, during any Performance Period as set out in advance in the Participant's Award Agreement. Prior to the grant of a Restricted Stock Award, the Committee will: (a) determine the nature, length, and starting date of any Performance Period for the Restricted Stock Award; (b) select from among the Performance Factors to be used to measure performance goals, if any; and (c) determine the number of Shares that may be awarded to the Participant. Performance Periods may overlap and a Participant may participate simultaneously with respect to Restricted Stock Awards that are subject to different Performance Periods and having different performance goals and other criteria.

**7.4.** Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on such date Participant's Service terminates (unless determined otherwise by the Committee).

**8. STOCK BONUS AWARDS**. A Stock Bonus Award is an award to an eligible Employee, Consultant, or Director of Shares for Services to be rendered or for past Services already rendered to the Company or any Parent, Subsidiary, or Affiliate. All Stock Bonus Awards will be made pursuant to an Award Agreement. No payment from the Participant will be required for Shares awarded pursuant to a Stock Bonus Award.

**8.1.** Terms of Stock Bonus Awards. The Committee will determine the number of Shares to be awarded to the Participant under a Stock Bonus Award and any restrictions thereon. These restrictions may be based upon completion of a specified period of Service with the Company or upon satisfaction of performance goals based on Performance Factors during any Performance Period as set out in advance in the Participant's Stock Bonus Agreement. Prior to the grant of any Stock Bonus Award the Committee will: (a) determine the restrictions to which the Stock Bonus Award is subject, including the nature, length, and starting date of any Performance Period for the Stock Bonus Award; (b) select from among the Performance Factors, if any, to be used to measure performance goals; and (c) determine the number of Shares that may be awarded to the Participant. Performance Periods may overlap and a Participant may participate simultaneously with respect to Stock Bonus Awards that are subject to different Performance Periods and different performance goals and other criteria.

**8.2.** Form of Payment to Participant. Payment may be made in the form of cash, whole Shares, or a combination thereof, based on the Fair Market Value of the Shares earned under a Stock Bonus Award on the date of payment, as determined in the sole discretion of the Committee.

**8.3.** Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on such date Participant's Service terminates (unless determined otherwise by the Committee).

**9. STOCK APPRECIATION RIGHTS**. A Stock Appreciation Right ("***SAR***") is an award to an eligible Employee, Consultant, or Director that may be settled in cash or Shares (which may consist of Restricted Stock) having a value equal to (a) the difference between the Fair Market Value on the date of exercise over the Exercise Price multiplied by (b) the number of Shares with respect to which the SAR is being settled (subject to any maximum number of Shares that may be issuable as specified in an Award Agreement). All SARs will be made pursuant to an Award Agreement.

**9.1.** Terms of SARs. The Committee will determine the terms of each SAR including, without limitation: (a) the number of Shares subject to the SAR, (b) the Exercise Price and the time or times during which the SAR may be exercised and settled, (c) the consideration to be distributed on exercise and settlement of the SAR, and (d) the effect of the Participant's termination of Service on each SAR. The Exercise Price of the SAR will be determined by the Committee when the SAR is granted and may not be less than Fair Market Value of the Shares on the date of grant. A SAR may be awarded upon satisfaction of Performance Factors, if any, during any Performance Period as are set out in advance in the Participant's individual Award Agreement. If the SAR is being earned upon the satisfaction of Performance Factors, then the Committee will: (i) determine the nature, length, and starting date of any Performance Period for each SAR; and (ii) select from among the Performance Factors to be used to measure the performance, if any. Performance Periods may overlap and Participants may participate simultaneously with respect to SARs that are subject to different Performance Factors and other criteria.

**9.2.** Exercise Period and Expiration Date. A SAR will be exercisable within the times or upon the occurrence of events determined by the Committee and set forth in the Award Agreement governing such SAR. The SAR Agreement will set forth the expiration date, provided that no SAR will be exercisable after the expiration of ten (10) years from the date the SAR is granted. The Committee may also provide for SARs to become exercisable at one time or from time to time, periodically or otherwise (including, without limitation, upon the attainment during a Performance Period of performance goals based on Performance Factors), in such number of Shares or percentage of the Shares subject to the SAR as the Committee determines. Except as may be set forth in the Participant's Award Agreement, vesting ceases on the date Participant's Service terminates (unless determined otherwise by the Committee). Notwithstanding the foregoing, the rules of Section 5.6 also will apply to SARs.

**9.3.** Form of Settlement. Upon exercise of a SAR, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying (a) the difference between the Fair Market Value of a Share on the date of exercise over the Exercise Price, by (b) the number of Shares with respect to which the SAR is exercised. At the discretion of the Committee, the payment from the Company for the SAR exercise may be in cash, in Shares of equivalent value, or in some combination thereof. The portion of a SAR being settled may be paid currently or on a deferred basis with such interest, if any, as the Committee determines, provided that the terms of the SAR and any deferral satisfy the requirements of Section 409A of the Code to the extent applicable.

**9.4.** Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on the date Participant's Service terminates (unless determined otherwise by the Committee).

**10. PERFORMANCE AWARDS**.

**10.1.** Types of Performance Awards. A Performance Award is an award to an eligible Employee, Consultant, or Director that is based upon the attainment of performance goals, as established by the Committee, and other terms and conditions specified by the Committee, and may be settled in cash, Shares (which may consist of, without limitation, Restricted Stock), other property, or any combination thereof. Grants of Performance Awards will be made pursuant to an Award Agreement that cites Section 10 of the Plan.

(a) Performance Shares. The Committee may grant Awards of Performance Shares, designate the Participants to whom Performance Shares are to be awarded, and determine the number of Performance Shares and the terms and conditions of each such Award. Performance Shares will consist of a unit valued by reference to a designated number of Shares, the value of which may be paid to the Participant by delivery of Shares or, if set forth in the instrument evidencing the Award, of such property as the Committee will determine, including, without limitation, cash, Shares, other property, or any combination thereof, upon the attainment of performance goals, as established by the Committee, and other terms and conditions specified by the Committee. The amount to be paid under an Award of Performance Shares may be adjusted on the basis of such further consideration as the Committee will determine in its sole discretion.

(b) Performance Units. The Committee may grant Awards of Performance Units, designate the Participants to whom Performance Units are to be awarded, and determine the number of Performance Units and the terms and conditions of each such Award. Performance Units will consist of a unit valued by reference to a designated amount of property other than Shares, which value may be paid to the Participant by delivery of such property as the Committee will determine, including, without limitation, cash, Shares, other property, or any combination thereof, upon the attainment of performance goals, as established by the Committee, and other terms and conditions specified by the Committee.

(c) Cash-Settled Performance Awards. The Committee may also grant cash-settled Performance Awards to Participants under the terms of this Plan. Such awards will be based on the attainment of performance goals using the Performance Factors within this Plan that are established by the Committee for the relevant performance period.

**10.2.** Terms of Performance Awards. The Committee will determine, and each Award Agreement will set forth, the terms of each Performance Award including, without limitation: (a) the amount of any cash bonus, (b) the number of Shares deemed subject to an award of Performance Shares, (c) the Performance Factors and Performance Period that will determine the time and extent to which each award of Performance Shares will be settled, (d) the consideration to be distributed on settlement, and (e) the effect of the Participant's termination of Service on each Performance Award. In establishing Performance Factors and the Performance Period the Committee will: (i) determine the nature, length, and starting date of any Performance Period; (ii) select from among the Performance Factors to be used; and (iii) determine the number of Shares deemed subject to the award of Performance Shares. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant. Prior to settlement the Committee will determine the extent to which Performance Awards have been earned. Performance Periods may overlap and Participants may participate simultaneously with respect to Performance Awards that are subject to different Performance Periods and different performance goals and other criteria.

**10.3.** Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on the date Participant's Service terminates (unless determined otherwise by the Committee).

**11. PAYMENT FOR SHARE PURCHASES**. Payment from a Participant for Shares purchased pursuant to this Plan may be made in cash or by check or, where expressly approved for the Participant by the Committee and where permitted by law (and to the extent not otherwise set forth in the applicable Award Agreement):

(a) by cancellation of indebtedness of the Company to the Participant;

(b) by surrender of shares of the Company held by the Participant that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Award will be exercised or settled;

(c) by waiver of compensation due or accrued to the Participant for services rendered or to be rendered to the Company or a Parent or Subsidiary;

(d) by consideration received by the Company pursuant to a broker-assisted or other form of cashless exercise program implemented by the Company in connection with the Plan;

(e) by any combination of the foregoing; or

(f) by any other method of payment as is permitted by applicable law.

The Committee may limit the availability of any method of payment, to the extent the Committee determines, in its discretion, such limitation is necessary or advisable to comply with applicable law or facilitate the administration of the Plan.

**12. GRANTS TO NON-EMPLOYEE DIRECTORS**.

**12.1.** General. Non-Employee Directors are eligible to receive any type of Award offered under this Plan except ISOs. Awards pursuant to this Section 12 may be automatically made pursuant to policy adopted by the Board, or made from time to time as determined in the discretion of the Board. No Non-Employee Director may receive Awards under the Plan that, when combined with cash compensation received for service as a Non-Employee Director after the Effective Date, exceed $1,000,000 in value (as described below) in any calendar year; provided, however, that a Non-Employee Director may receive up to $1,500,000 in value in his or her initial year of service as a Non-Employee Director. The value of Awards for purposes of complying with this maximum will be determined as follows: (a) for Options and SARs, grant date fair value will be calculated using the Company's regular valuation methodology for determining the grant date fair value of Options for reporting purposes, and (b) for all other Awards other than Options and SARs, grant date fair value will be determined by either (i) calculating the product of the Fair Market Value per Share on the date of grant and the aggregate number of Shares subject to the Award, or (ii) calculating the product using an average of the Fair Market Value over a number of trading days and the aggregate number of Shares subject to the Award as determined by the Committee. Awards granted to an individual while he or she was serving in the capacity as an Employee or while he or she was a Consultant but not a Non-Employee Director will not count for purposes of the limitations set forth in this Section 12.1.

**12.2.** Eligibility. Awards pursuant to this Section 12 will be granted only to Non-Employee Directors. A Non-Employee Director who is elected or re-elected as a member of the Board will be eligible to receive an Award under this Section 12.

**12.3.** Vesting, Exercisability and Settlement. Except as set forth in Section 21, Awards will vest, become exercisable, and be settled as determined by the Board. With respect to Options and SARs, the exercise price granted to Non-Employee Directors will not be less than the Fair Market Value of the Shares at the time that such Option or SAR is granted.

**12.4.** Election to Receive Awards in Lieu of Cash. A Non-Employee Director may elect to receive his or her annual retainer payments and/or meeting fees from the Company in the form of cash or Awards or a combination thereof, if permitted, and as determined, by the Committee. Such Awards will be issued under the Plan. An election under this Section 12.4 will be filed with the Company on the form prescribed by the Company.

**13. WITHHOLDING TAXES**.

**13.1.** Withholding Generally. Whenever Shares are to be issued in satisfaction of Awards granted under this Plan or a tax event occurs, the Company may require the Participant to remit to the Company, or to the Parent, Subsidiary, or Affiliate, as applicable, employing the Participant an amount sufficient to satisfy applicable U.S. federal, state, local, and international income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items (the "***Tax-Related Items***") legally due from the Participant prior to the delivery of Shares pursuant to exercise or settlement of any Award. Whenever payments in satisfaction of Awards granted under this Plan are to be made in cash, such payment will be net of an amount sufficient to satisfy applicable withholding obligations for Tax-Related Items. Unless otherwise determined by the Committee, the Fair Market Value of the Shares will be determined as of the date that the taxes are required to be withheld and such Shares will be valued based on the value of the actual trade or, if there is none, the Fair Market Value of the Shares as of the previous trading day.

**13.2.** Stock Withholding. The Committee, or its delegate(s), as permitted by applicable law, in its sole discretion and pursuant to such procedures as it may specify from time to time and to limitations of local law, may require or permit a Participant to satisfy such Tax Related Items legally due from the Participant, in whole or in part by (without limitation) (a) paying cash, (b) having the Company withhold

otherwise deliverable cash or Shares having a Fair Market Value equal to the Tax-Related Items to be withheld, (c) delivering to the Company already-owned shares having a Fair Market Value equal to the Tax-Related Items to be withheld, or (d) withholding from the proceeds of the sale of otherwise deliverable Shares acquired pursuant to an Award either through a voluntary sale or through a mandatory sale arranged by the Company. The Company may withhold or account for these Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum permissible statutory tax rate for the applicable tax jurisdiction, to the extent consistent with applicable laws.

**14. TRANSFERABILITY**. Unless determined otherwise by the Committee, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution. If the Committee makes an Award transferable, including, without limitation, by instrument to an inter vivos or testamentary trust in which the Awards are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or by domestic relations order to a Permitted Transferee, such Award will contain such additional terms and conditions as the Committee deems appropriate. All Awards will be exercisable: (a) during the Participant's lifetime only by the Participant or the Participant's guardian or legal representative; (b) after the Participant's death, by the legal representative of the Participant's heirs or legatees; and (c) in the case of all awards except ISOs, by a Permitted Transferee.

**15. PRIVILEGES OF STOCK OWNERSHIP; RESTRICTIONS ON SHARES**.

**15.1.** Voting and Dividends. No Participant will have any of the rights of a stockholder with respect to any Shares until the Shares are issued to the Participant, except for any Dividend Equivalent Rights permitted by an applicable Award Agreement. Any Dividend Equivalent Rights will be subject to the same vesting or performance conditions as the underlying Award. In addition, the Committee may provide that any Dividend Equivalent Rights permitted by an applicable Award Agreement will be deemed to have been reinvested in additional Shares or otherwise reinvested. After Shares are issued to the Participant, the Participant will be a stockholder and have all the rights of a stockholder with respect to such Shares, including the right to vote and receive all dividends or other distributions made or paid with respect to such Shares; provided, that if such Shares are Restricted Stock, then any new, additional or different securities the Participant may become entitled to receive with respect to such Shares by virtue of a stock dividend, stock split or any other change in the corporate or capital structure of the Company will be subject to the same restrictions as the Restricted Stock; provided, further, that the Participant will have no right to such stock dividends or stock distributions with respect to Unvested Shares, and any such dividends or stock distributions will be accrued and paid only at such time, if any, as such Unvested Shares become vested Shares. The Committee, in its discretion, may provide in the Award Agreement evidencing any Award that the Participant will be entitled to Dividend Equivalent Rights with respect to the payment of cash dividends on Shares underlying an Award during the period beginning on the date the Award is granted and ending, with respect to each Share subject to the Award, on the earlier of the date on which the Award is exercised or settled or the date on which it is forfeited provided, that no Dividend Equivalent Right will be paid with respect to the Unvested Shares, and such dividends or stock distributions will be accrued and paid only at such time, if any, as such Unvested Shares become vested Shares. Such Dividend Equivalent Rights, if any, will be credited to the Participant in the form of additional whole Shares as of the date of payment of such cash dividends on Shares.

**15.2.** Restrictions on Shares. At the discretion of the Committee, the Company may reserve to itself and/or its assignee(s) a right to repurchase (a "***Right of Repurchase***") a portion of any or all Unvested Shares held by a Participant following such Participant's termination of Service at any time within ninety (90) days (or such longer or shorter time determined by the Committee) after the later of the date Participant's Service terminates and the date the Participant purchases Shares under this Plan, for cash and/or cancellation of purchase money indebtedness, at the Participant's Purchase Price or Exercise Price, as the case may be.

**16. CERTIFICATES**. All Shares or other securities whether or not certificated, delivered under this Plan will be subject to such stock transfer orders, legends, and other restrictions as the Committee may deem necessary or advisable, including restrictions under any applicable U.S. federal, state, or foreign securities law, or any rules, regulations, and other requirements of the SEC or any stock exchange or automated quotation system upon which the Shares may be listed or quoted, and any non-U.S. exchange controls or securities law restrictions to which the Shares are subject.

**17. ESCROW; PLEDGE OF SHARES**. To enforce any restrictions on a Participant's Shares, the Committee may require the Participant to deposit all certificates representing Shares, together with stock powers or other instruments of transfer approved by the Committee, appropriately endorsed in blank, with the Company or an agent designated by the Company to hold in escrow until such restrictions have lapsed or terminated, and the Committee may cause a legend or legends referencing such restrictions to be placed on the certificates. Any Participant who is permitted to execute a promissory note as partial or full consideration for the purchase of Shares under this Plan will be required to pledge and deposit with the Company all or part of the Shares so purchased as collateral to secure the payment of the Participant's obligation to the Company under the promissory note, provided, however, that the Committee may require or accept other or additional forms of collateral to secure the payment of such obligation and, in any event, the Company will have full recourse against the Participant under the promissory note notwithstanding any pledge of the Participant's Shares or other collateral. In connection with any pledge of the Shares, the Participant will be required to execute and deliver a written pledge agreement in such form as the Committee will from time to time approve. The Shares purchased with the promissory note may be released from the pledge on a pro rata basis as the promissory note is paid.

**18. REPRICING; EXCHANGE AND BUYOUT OF AWARDS**. Without prior stockholder approval the Committee may (a) reprice Options or SARs (and where such repricing is a reduction in the Exercise Price of outstanding Options or SARs, the consent of the affected Participants is not required provided written notice is provided to them, notwithstanding any adverse tax consequences to them arising from the repricing), and (b) with the consent of the respective Participants (unless not required pursuant to Section 5.9 of the Plan), pay cash or issue new Awards in exchange for the surrender and cancellation of any, or all, outstanding Awards.

**19. SECURITIES LAW AND OTHER REGULATORY COMPLIANCE**. An Award will not be effective unless such Award is in compliance with all applicable U.S. and foreign federal and state securities and exchange control and other laws, rules, and regulations of any governmental body, and the requirements of any stock exchange or automated quotation system upon which the Shares may then be listed or quoted, as they are in effect on the date of grant of the Award and also on the date of exercise or other issuance. Notwithstanding any other provision in this Plan, the Company will have no obligation to issue or deliver certificates for Shares under this Plan prior to: (a) obtaining any approvals from governmental agencies that the Company determines are necessary or advisable and/or (b) completion of any registration or other qualification of such Shares under any state, federal, or foreign law or ruling of any governmental body that the Company determines to be necessary or advisable. The Company will be under no obligation to register the Shares with the SEC or to effect compliance with the registration, qualification, or listing requirements of any foreign or state securities laws, exchange control laws, stock exchange, or automated quotation system, and the Company will have no liability for any inability or failure to do so.

**20. NO OBLIGATION TO EMPLOY**. Nothing in this Plan or any Award granted under this Plan will confer or be deemed to confer on any Participant any right to continue in the employ of, or to continue any other relationship with, the Company or any Parent, Subsidiary, or Affiliate or limit in any way the right of the Company or any Parent, Subsidiary, or Affiliate to terminate Participant's employment or other relationship at any time.

**21. CORPORATE TRANSACTIONS**.

**21.1.** Assumption or Replacement of Awards by Successor. In the event that the Company is subject to a Corporate Transaction, outstanding Awards acquired under the Plan shall be subject to the agreement evidencing the Corporate Transaction, which need not treat all outstanding Awards in an identical manner. Such agreement, without the Participant's consent, shall provide for one or more of the following with respect to all outstanding Awards as of the effective date of such Corporate Transaction:

(a) The continuation of an outstanding Award by the Company (if the Company is the successor entity).

(b) The assumption of an outstanding Award by the successor or acquiring entity (if any) of such Corporate Transaction (or by its parents, if any), which assumption, will be binding on all selected Participants; provided that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code and/or Section 409A of the Code, as applicable.

(c) The substitution by the successor or acquiring entity in such Corporate Transaction (or by its parents, if any) of equivalent awards with substantially the same terms for such outstanding Awards (except that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code and/or Section 409A of the Code, as applicable).

(d) The full or partial acceleration of exercisability or vesting and accelerated expiration of an outstanding Award and lapse of the Company's right to repurchase or re-acquire shares acquired under an Award or lapse of forfeiture rights with respect to shares acquired under an Award.

(e) The settlement of the full value of such outstanding Award (whether or not then vested or exercisable) in cash, cash equivalents, or securities of the successor entity (or its parent, if any) with a fair market value equal to the required amount, followed by the cancellation of such Awards; provided however, that such Award may be cancelled if such Award has no value, as determined by the Committee, in its discretion. Subject to Section 409A of the Code, such payment may be made in installments and may be deferred until the date or dates the Award would have become exercisable or vested. Such payment may be subject to vesting based on the Participant's continued service, provided that the vesting schedule shall not be less favorable to the Participant than the schedule under which the Award would have become vested or exercisable. For purposes of this Section 21.1(e), the fair market value of any security shall be determined without regard to any vesting conditions that may apply to such security.

(f) The cancellation of outstanding Awards in exchange for no consideration.

The Board shall have full power and authority to assign the Company's right to repurchase or re-acquire or forfeiture rights to such successor or acquiring corporation. In addition, in the event such successor or acquiring corporation (if any) refuses to assume, convert, replace or substitute Awards, as provided above, pursuant to a Corporate Transaction, the Committee will notify the Participant in writing or electronically that such Participant's Award will, if exercisable, be exercisable for a period of time determined by the Committee in its sole discretion, and such Award will terminate upon the expiration of such period. Awards need not be treated similarly in a Corporate Transaction and treatment may vary from Award to Award and/or from Participant to Participant.

**21.2.** Assumption of Awards by the Company. The Company, from time to time, also may substitute or assume outstanding awards granted by another company, whether in connection with an acquisition of such other company or otherwise, by either: (a) granting an Award under this Plan in substitution of such other company's award, or (b) assuming such award as if it had been granted under this Plan if the terms of such assumed award could be applied to an Award granted under this Plan. Such substitution or assumption will be permissible if the holder of the substituted or assumed award would have been eligible to be granted an Award under this Plan if the other company had applied the rules of this Plan to such grant. In the event the Company assumes an award granted by another company, the terms and conditions of such award will remain unchanged (except that the Purchase Price or the Exercise Price, as the case may be, and the number and nature of Shares issuable upon exercise or settlement of any such Award will be adjusted appropriately pursuant to Section 424(a) of the Code). In the event the Company elects to grant a new Option in substitution rather than assuming an existing option, such new Option may be granted with a similarly adjusted Exercise Price. Substitute Awards will not reduce the number of Shares authorized for grant under the Plan or authorized for grant to a Participant in a calendar year.

**21.3.** Non-Employee Directors' Awards. Notwithstanding any provision to the contrary herein, in the event of a Corporate Transaction, the vesting of all Awards granted to Non-Employee Directors will accelerate and such Awards will become exercisable (as applicable) in full prior to the consummation of such event at such times and on such conditions as the Committee determines.

**22. ADOPTION AND STOCKHOLDER APPROVAL**. This Plan will be submitted for the approval of the Company's stockholders, consistent with applicable laws, within twelve (12) months before or after the date this Plan is adopted by the Board.

**23. TERM OF PLAN/GOVERNING LAW**. Unless earlier terminated as provided herein, this Plan will become effective on the Effective Date and will terminate ten (10) years from the date this Plan is adopted by the Board. This Plan and all Awards granted hereunder will be governed by and construed in accordance with the laws of the State of Delaware (excluding its conflict of laws rules).

**24. AMENDMENT OR TERMINATION OF PLAN**. The Board may at any time terminate or amend this Plan in any respect, including, without limitation, amendment of any form of Award Agreement or instrument to be executed pursuant to this Plan, provided, however, that the Board will not, without the approval of the stockholders of the Company, amend this Plan in any manner that requires such stockholder approval, provided further that a Participant's Award will be governed by the version of this Plan then in effect at the time such Award was granted. No termination or amendment of the Plan will affect any then-outstanding Award unless expressly provided by the Committee. In any event, no termination or amendment of the Plan or any outstanding Award may adversely affect any then outstanding Award without the consent of the Participant, unless such termination or amendment is necessary to comply with applicable law, regulation, or rule.

**25. NONEXCLUSIVITY OF THE PLAN**. Neither the adoption of this Plan by the Board, the submission of this Plan to the stockholders of the Company for approval, nor any provision of this Plan will be construed as creating any limitations on the power of the Board to adopt such additional compensation arrangements as it may deem desirable, including, without limitation, the granting of stock awards and bonuses otherwise than under this Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

**26. INSIDER TRADING POLICY**. Each Participant who receives an Award will comply with any policy adopted by the Company from time to time covering transactions in the Company's securities by Employees, officers, and/or Directors of the Company, as well as with any applicable insider trading or market abuse laws to which the Participant may be subject.

**27. ALL AWARDS SUBJECT TO COMPANY CLAWBACK OR RECOUPMENT POLICY**. All Awards, subject to applicable law, will be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Participant's employment or other service with the Company that is applicable to officers, Employees, Directors or other service providers of the Company, and in addition to any other remedies available under such policy and applicable law, may require the cancellation of outstanding Awards and the recoupment of any gains realized with respect to Awards.

**28. DEFINITIONS**. As used in this Plan, and except as elsewhere defined herein, the following terms will have the following meanings:

**28.1.** "***Affiliate***" means (a) any entity that, directly or indirectly, is controlled by, controls, or is under common control with, the Company, and (b) any entity in which the Company has a significant equity interest, in either case as determined by the Committee, whether now or hereafter existing.

**28.2.** "***Award***" means any award under the Plan, including any Option, Performance Award, Restricted Stock, Stock Bonus, Stock Appreciation Right, or Restricted Stock Unit.

**28.3.** "***Award Agreement***" means, with respect to each Award, the written or electronic agreement between the Company and the Participant setting forth the terms and conditions of the Award, and country-specific appendix thereto for grants to non-U.S. Participants, which will be in substantially a form (which need not be the same for each Participant) that the Committee (or in the case of Award agreements that are not used for Insiders, the Committee's delegate(s)) has from time to time approved, and will comply with and be subject to the terms and conditions of this Plan.

**28.4.** "***Board***" means the Board of Directors of the Company.

**28.5.** "**Cause**" means (i) an unauthorized use or disclosure by Participant of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company or is reasonably likely to cause material harm to the Company, (ii) a material breach of any agreement between Participant and the Company, (iii) a material failure to comply with the Company's written policies or rules that has caused or is reasonably likely to cause material injury to the Company, its successor, or its affiliates, or any of their business, (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof, (v) willful misconduct that has caused or is reasonably likely to cause material injury to the Company, its successor, or its affiliates, or any of their business, (vi) embezzlement, (vii) failure to cooperate with the Company in any investigation or formal proceeding if the Company has requested Participant's reasonable cooperation, (viii) violation of any applicable federal, state or foreign statutes or laws that govern or regulate employment, pharmaceutical drugs or securities, including but not limited to the laws enforced by the federal Equal Employment Opportunity Commission, Department of Labor, Food and Drug Administration, Securities and Exchange Commission and Department of Justice or (ix) a continued failure to perform assigned duties after receiving written notification of such failure from the Company's Chief Executive Officer; provided that Participant must be provided with written notice of Participant's termination for "Cause" and Participant must be provided with a thirty (30) day period following Participant's receipt of such notice to cure the event(s) that trigger "Cause," with the Company's Chief Executive Officer making the final determination whether Participant has cured any Cause. The determination as to whether a Participant is being terminated for Cause shall be made in good faith by the

Company and shall be final and binding on the Participant. This definition does not in any way limit the Company's or any Parent's or Subsidiary's ability to terminate a Participant's employment or services at any time as provided in Section 20 above. Notwithstanding the foregoing, the foregoing definition of "Cause" may, in part or in whole, be modified or replaced in each individual employment agreement, Award Agreement, or other applicable agreement with any Participant, provided that such document explicitly supersedes the definition provided in this Section 28.5.

**28.6.** "***Code***" means the United States Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder.

**28.7.** "***Committee***" means the Compensation Committee of the Board or those persons to whom administration of the Plan, or part of the Plan, has been delegated as permitted by law.

**28.8.** "***Common Stock***" means the common stock of the Company.

**28.9.** "***Company***" means Third Harmonic Bio, Inc., a Delaware corporation, or any successor corporation.

**28.10.** "***Consultant***" means any natural person, including an advisor or independent contractor, engaged by the Company or a Parent, Subsidiary, or Affiliate to render services to such entity.

**28.11.** "***Corporate Transaction***" means the occurrence of any of the following events: (a) any "Person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company's then-outstanding voting securities, provided, however, that for purposes of this subclause (a) the acquisition of additional securities by any one Person who is considered to own more than fifty percent (50%) of the total voting power of the securities of the Company will not be considered a Corporate Transaction; (b) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; (c) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation; (d) any other transaction which qualifies as a "corporate transaction" under Section 424(a) of the Code wherein the stockholders of the Company give up all of their equity interest in the Company (except for the acquisition, sale or transfer of all or substantially all of the outstanding shares of capital stock of the Company), or (e) a change in the effective control of the Company that occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by members of the Board whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purpose of this subclause (e), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Corporate Transaction. For purposes of this definition, Persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase, or acquisition of stock, or similar business transaction with the Company. Notwithstanding the foregoing, to the extent that any amount constituting deferred compensation (as defined in Section 409A of the Code) would become payable under this Plan by reason of a Corporate Transaction, such amount will become payable only if the event constituting a Corporate Transaction would also qualify as a change in ownership or effective control of the Company or a change in the ownership of a substantial portion of the assets of the Company, each as defined within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and IRS guidance that has been promulgated or may be promulgated thereunder from time to time.

**28.12.** "***Director***" means a member of the Board.

**28.13.** "***Disability***" means in the case of incentive stock options, total and permanent disability as defined in Section 22(e)(3) of the Code and in the case of other Awards, that the Participant is unable 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 can be expected to last for a continuous period of not less than twelve (12) months.

**28.14.** "***Dividend Equivalent Right***" means the right of a Participant, granted at the discretion of the Committee or as otherwise provided by the Plan, to receive a credit for the account of such Participant in an amount equal to the cash, stock, or other property dividends in amounts equal equivalent to cash, stock, or other property dividends for each Share represented by an Award held by such Participant.

**28.15.** "***Effective Date***" means the day immediately prior to the Company's IPO Registration Date, subject to approval of the Plan by the Company's stockholders.

**28.16.** "***Employee***" means any person, including officers and Directors, providing services as an employee to the Company or any Parent, Subsidiary, or Affiliate. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

**28.17.** "***Exchange Act***" means the United States Securities Exchange Act of 1934, as amended.

**28.18.** "***Exchange Program***" means a program pursuant to which (a) outstanding Awards are surrendered, cancelled, or exchanged for cash, the same type of Award, or a different Award (or combination thereof); or (b) the exercise price of an outstanding Award is increased or reduced.

**28.19.** "***Exercise Price***" means, with respect to an Option, the price at which a holder may purchase the Shares issuable upon exercise of an Option and with respect to a SAR, the price at which the SAR is granted to the holder thereof.

**28.20.** "***Fair Market Value***" means, as of any date, the value of a Share, determined as follows:

(a) if such Common Stock is publicly traded and is then listed on a national securities exchange, its closing price on the date of determination on the principal national securities exchange on which the Common Stock is listed or admitted to trading as reported in *The Wall Street* Journal or such other source as the Committee deems reliable;

(b) if such Common Stock is publicly traded but is neither listed nor admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of determination as reported in *The Wall Street Journal* or such other source as the Committee deems reliable;

(a) in the case of an Option or SAR grant made on the IPO Registration Date, the price per share at which Shares are initially offered for sale to the public by the Company's underwriters in the initial public offering of Shares as set forth in the Company's final prospectus included within the registration statement on Form S-1 filed with the SEC under the Securities Act; or

(c) by the Board or the Committee in good faith.

**28.21.** "***Insider***" means an officer or Director of the Company or any other person whose transactions in the Company's Common Stock are subject to Section 16 of the Exchange Act.

**28.22.** "***IPO Registration Date***" means the date on which the Company's registration statement on Form S-1 in connection with its initial public offering of common stock is declared effective by the SEC under the Securities Act.

**28.23.** "***IRS***" means the United States Internal Revenue Service.

**28.24.** "***Non-Employee Director***" means a Director who is not an Employee of the Company or any Parent, Subsidiary, or Affiliate.

**28.25.** "***Option***" means an award of an option to purchase Shares pursuant to Section 5.

**28.26.** "***Parent***" means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company if each of such corporations other than the Company owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

**28.27.** "***Participant***" means a person who holds an Award under this Plan.

**28.28.** "***Performance Award***" means an Award as defined in Section 10 and granted under the Plan, the payment of which is contingent upon achieving certain performance goals established by the Committee.

**28.29.** "***Performance Factors***" means any of the factors selected by the Committee and specified in an Award Agreement, from among the following measures, either individually, alternatively or in any combination, applied to the Company as a whole or any business unit or Subsidiary, either individually, alternatively, or in any combination, on a GAAP or non-GAAP basis, and measured, to the extent applicable on an absolute basis or relative to a pre-established target, to determine whether the performance goals established by the Committee with respect to applicable Awards have been satisfied:

(a) profit before tax;

(b) billings;

(c) revenue;

(d) net revenue;

(e) earnings (which may include earnings before interest and taxes, earnings before taxes, net earnings, stock-based compensation expenses, depreciation, and amortization);

(f) operating income;

(g) operating margin;

(h) operating profit;

(i) controllable operating profit or net operating profit;

(j) net profit;

(k) gross margin;

(l) operating expenses or operating expenses as a percentage of revenue;

(m) net income;

(n) earnings per share;

(o) total stockholder return;

(p) market share;

(q) return on assets or net assets;

(r) the Company's stock price;

(s) growth in stockholder value relative to a pre-determined index;

(t) return on equity;

(u) return on invested capital;

(v) cash flow (including free cash flow or operating cash flows);

(w) cash conversion cycle;

(x) economic value added;

(y) individual confidential business objectives;

(z) contract awards or backlog;

(aa) overhead or other expense reduction;

(bb) credit rating;

(cc) strategic plan development and implementation;

(dd) succession plan development and implementation;

(ee) improvement in workforce diversity;

(ff) customer indicators and/or satisfaction;

(gg) new product invention or innovation;

(hh) attainment of research and development milestones;

(ii) improvements in productivity;

(jj) bookings;

(kk) attainment of objective operating goals and employee metrics;

(ll) sales;

(mm) expenses;

(nn) balance of cash, cash equivalents, and marketable securities;

(oo) completion of an identified special project;

(pp) completion of a joint venture or other corporate transaction;

(qq) employee satisfaction and/or retention;

(rr) research and development expenses;

(ss) working capital targets and changes in working capital; and

(tt) any other metric that is capable of measurement as determined by the Committee.

The Committee may provide for one or more equitable adjustments to the Performance Factors to preserve the Committee's original intent regarding the Performance Factors at the time of the initial award grant, such as but not limited to, adjustments in recognition of unusual or non-recurring items such as acquisition related activities or changes in applicable accounting rules. It is within the sole discretion of the Committee to make or not make any such equitable adjustments.

**28.30.** "***Performance Period***" means one or more periods of time, which may be of varying and overlapping durations, as the Committee may select, over which the attainment of one or more Performance Factors will be measured for the purpose of determining a Participant's right to, and the payment of, a Performance Award.

**28.31.** "***Performance Share***" means an Award as defined in Section 10 and granted under the Plan, the payment of which is contingent upon achieving certain performance goals established by the Committee.

**28.32.** "***Performance Unit***" means an Award as defined in Section 10 and granted under the Plan, the payment of which is contingent upon achieving certain performance goals established by the Committee.

**28.33.** "***Permitted Transferee***" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships) of the Employee, any person sharing the Employee's household (other than a tenant or employee), a trust in which these persons (or the Employee) have more than 50% of the beneficial interest, a foundation in which these persons (or the Employee) control the management of assets, and any other entity in which these persons (or the Employee) own more than 50% of the voting interests.

**28.34.** "***Plan***" means this Third Harmonic Bio, Inc. 2022 Equity Incentive Plan.

**28.35.** "***Pre-Funded Warrant***" mean any warrant to acquire shares of Company common stock for a nominal exercise price.

**28.36.** "***Purchase Price***" means the price to be paid for Shares acquired under the Plan, other than Shares acquired upon exercise of an Option or SAR.

**28.37.** "***Restricted Stock Award***" means an Award as defined in Section 6 and granted under the Plan, or issued pursuant to the early exercise of an Option.

**28.38.** "***Restricted Stock Unit***" means an Award as defined in Section 9 and granted under the Plan.

**28.39.** "***SEC***" means the United States Securities and Exchange Commission.

**28.40.** "***Securities Act***" means the United States Securities Act of 1933, as amended.

**28.41.** "***Service***" will mean service as an Employee, Consultant, Director, or Non-Employee Director, to the Company or a Parent, Subsidiary, or Affiliate, subject to such further limitations as may be set forth in the Plan or the applicable Award Agreement. An Employee will not be deemed to have ceased to provide Service in the case of any leave of absence approved by the Company. In the case of any Employee on an approved leave of absence or a reduction in hours worked (for illustrative purposes only, a change in schedule from that of full-time to part-time), the Committee may make such provisions respecting suspension of or modification to vesting of the Award while on leave from the employ of the Company or a Parent, Subsidiary or Affiliate or during such change in working hours as it may deem appropriate, except that in no event may an Award be exercised after the expiration of the term set forth in the applicable Award Agreement. In the event of military or other protected leave, if required by applicable laws, vesting will continue for the longest period that vesting continues under any other statutory or Company approved leave of absence and, upon a Participant's returning from military leave, he or she will be given vesting credit with respect to Awards to the same extent as would have applied had the Participant continued to provide Service to the Company throughout the leave on the same terms as he or she was providing Service immediately prior to such leave. An employee shall have terminated employment as of the date he or she ceases to provide Service (regardless of whether the termination is in breach of local employment laws or is later found to be invalid) and employment shall not be extended by any notice period or garden leave mandated by local law, *provided*, *however*, that a change in status between an Employee, Consultant, Director or Non-Employee Director shall not terminate the Participant's Service, unless determined by the Committee, in its discretion or to the extent set forth in the applicable Award Agreement. The Committee will have sole discretion to determine whether a Participant has ceased to provide Service and the effective date on which the Participant ceased to provide Service. An employee will have terminated employment as of the date he or she ceases to provide Service (regardless of whether the termination is in breach of local employment laws or is later found to be invalid) and employment will not be extended by any notice period or garden leave mandated by local law, provided, however, that a change in status from an Employee to a Consultant or Non-Employee Director (or vice versa) will not terminate the Participant's Service, unless determined by the Committee, in its discretion. The Committee will have sole discretion to determine whether a Participant has ceased to provide Service and the effective date on which the Participant ceased to provide Service.

**28.42.** "***Shares***" means shares of the Common Stock and the common stock of any successor entity of the Company.

**28.43.** "***Stock Appreciation Right***" means an Award defined in Section 8 and granted under the Plan.

**28.44.** "***Stock Bonus***" means an Award defined in Section 7 and granted under the Plan.

**28.45.** "***Subsidiary***" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if each of the corporations other than the last corporation in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

**28.46.** "***Treasury Regulations***" means regulations promulgated by the United States Treasury Department.

**28.47.** "***Unvested Shares***" means Shares that have not yet vested or are subject to a right of repurchase in favor of the Company (or any successor thereto).

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**
**NOTICE OF STOCK OPTION GRANT**

You (the "***Optionee***") have been granted an option to purchase shares of Common Stock of the Company (the "***Option***") under the Third Harmonic Bio, Inc. (the "***Company***") 2022 Equity Incentive Plan (the "***Plan***") subject to the terms and conditions of the Plan, this Notice of Stock Option Grant (this "***Notice***")., and the Stock Option Agreement (the "***Option Agreement***").

Unless otherwise defined herein, the terms defined in the Plan will have the same meanings in this Notice and the electronic representation of this Notice established and maintained by the Company or a third party designated by the Company.

**Name**:

**Address**:

**Grant Number**:

**Date of Grant**:

**Vesting Commencement Date**:

**Exercise Price per Share**:

**Total Number of Shares**:

| | |
|---|---|
| **Type of Option:** | __ Non-Qualified Stock Option<br>_____Incentive Stock Option |
| **Expiration Date:** | _____ __, 20__; the Option expires earlier if Optionee's Service terminates earlier, as described in the Option Agreement. |
| **Vesting Schedule:** | Subject to the limitations set forth in this Notice, the Plan, and the Agreement, the Option will vest in accordance with the following schedule: [*insert applicable vesting schedule, which may include performance metrics*] |

By accepting (whether in writing, electronically, or otherwise) the Option, Optionee acknowledges and agrees to the following:

1) Optionee understands that Optionee's Service is for an unspecified duration, can be terminated at any time (*i.e.*, is "at-will") except where otherwise prohibited by applicable law, and that nothing in this Notice, the Option Agreement, or the Plan changes the nature of that relationship. Optionee acknowledges that the vesting of the Option pursuant to this Notice is subject to Optionee's continuing Service. Optionee agrees and acknowledges that the Vesting Schedule may change prospectively in the event that Optionee's Service status changes between full- and part-time and/or in the event the Optionee is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of Awards or as determined by the Committee.

2) This grant is made under and governed by the Plan, the Agreement, and this Notice, and this Notice is subject to the terms and conditions of the Agreement and the Plan, both of which are incorporated herein by reference. Optionee has read the Notice, the Option Agreement and, the Plan.

3) Optionee has read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Optionee acquires or disposes of the Company's securities.

4) By accepting the Option, Optionee consents to electronic delivery and participation as set forth in the Option Agreement.

**OPTIONEE**

Signature: _____

Print Name: _____

**THIRD HARMONIC BIO, INC.**

By: _____

Its: _____

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**
**STOCK OPTION AGREEMENT**

Unless otherwise defined in this Stock Option Agreement (this "***Option Agreement***"), any capitalized terms used herein will have the same meaning ascribed to them in the Third Harmonic Bio, Inc. 2022 Equity Incentive Plan (the "***Plan***").

Optionee has been granted an option to purchase Shares (the "***Option***") of Third Harmonic Bio, Inc. (the "***Company***"), subject to the terms, restrictions, and conditions of the Plan, the Notice of Stock Option Grant (the "***Notice***"), and this Option Agreement. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of the Notice or this Option Agreement, the terms and conditions of the Plan will prevail.

**1. Vesting.** Subject to the applicable provisions of the Plan and this Option Agreement, the Option may be exercised, in whole or in part, in accordance with the Vesting Schedule set forth in the Notice. Optionee acknowledges and agrees that the Vesting Schedule may change prospectively in the event Optionee's Service status changes between full and part-time and/or in the event Optionee is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of Awards or as determined by the Committee. Optionee acknowledges that the vesting of the Option pursuant to this Notice and Agreement is subject to Optionee's continuing Service.

**2. Grant of Option.** Optionee has been granted an Option for the number of Shares set forth in the Notice at the exercise price per Share in U.S. Dollars set forth in the Notice (the "***Exercise Price***"). If designated in the Notice as an Incentive Stock Option ("***ISO***"), the Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code. However, if the Option is intended to be an ISO, to the extent that it exceeds the U.S. $100,000 rule of Code Section 422(d) it will be treated as a Nonqualified Stock Option ("***NSO***").

**3. Termination Period.**

(a) General Rule. If Optionee's Service terminates for any reason except death or Disability, and other than for Cause, then the Option will expire at the close of business at Company headquarters on the date three (3) months after Optionee's Termination Date (as defined below) (with any exercise beyond three (3) months after the date Optionee's employment terminates deemed to be the exercise of an NSO). The Company determines when Optionee's Service terminates for all purposes under this Option Agreement.

(b) Death; Disability. If Optionee dies before Optionee's Service terminates (or Optionee dies within three (3) months of Optionee's termination of Service other than for Cause), then the Option will expire at the close of business at Company headquarters on the date twelve (12) months after the date of death (subject to the expiration details in Section 7). If Optionee's Service terminates because of Optionee's Disability, then the Option will expire at the close of business at Company headquarters on the date twelve (12) months after Optionee's Termination Date (subject to the expiration details in Section 7).

(c) Cause. Unless otherwise determined by the Committee, the Option (whether or not vested) will terminate immediately upon the Optionee's cessation of Services if the Company reasonably determines in good faith that such cessation of Services has resulted in connection with an act or failure to act constituting Cause (or the Optionee's Services could have been terminated for Cause (without regard to the lapsing of any required notice or cure periods in connection therewith) at the time the Optionee terminated Services).

(d) No Notification of Exercise Periods. Optionee is responsible for keeping track of these exercise periods following Optionee's termination of Service for any reason. The Company will not provide further notice of such periods. In no event will the Option be exercised later than the Expiration Date set forth in the Notice.

(e) Termination. For purposes of this Option, Optionee's Service will be considered terminated as of the date Optionee is no longer providing Service to the Company, its Parent or one of its Subsidiaries or Affiliates (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Optionee is employed or the terms of Optionee's employment agreement, if any) (the "***Termination Date***"). The Committee will have the exclusive discretion to determine when Optionee is no longer actively providing services for purposes of Optionee's Option (including whether Optionee may still be considered to be providing services while on an approved leave of absence). Unless otherwise provided in this Option Agreement or determined by the Company, Optionee's right to vest in this Option under the Plan, if any, will terminate as of the Termination Date and will not be extended by any notice period (*e.g.*, Optionee's period of Service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Optionee is employed or the terms of Optionee's employment agreement, if any). Following the Termination Date, Optionee may exercise the Option only as set forth in the Notice and this Section, provided that the period (if any) during which Optionee may exercise the Option after the Termination Date, if any, will commence on the date Optionee ceases to provide services and will not be extended by any notice period mandated under employment laws in the jurisdiction where Optionee is employed or terms of Optionee's employment agreement, if any. If Optionee does not exercise this Option within the termination period set forth in the Notice or the termination periods set forth above, the Option will terminate in its entirety. In no event, may any Option be exercised after the Expiration Date of the Option as set forth in the Notice.

**4. Exercise of Option.**

(a) Right to Exercise. The Option is exercisable during its term in accordance with the Vesting Schedule set forth in the Notice and the applicable provisions of the Plan and this Option Agreement. In the event of Optionee's death, Disability, termination for Cause, or other cessation of Service, the exercisability of the Option is governed by the applicable provisions of the Plan, the Notice, and this Option Agreement. The Option may not be exercised for a fraction of a Share.

(b) Method of Exercise. The Option is exercisable by delivery of an exercise notice in a form specified by the Company (the "***Exercise Notice***"), which will state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the "***Exercised Shares***"), and such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice will be delivered in person, by mail, via electronic mail or facsimile or by other authorized method to the Secretary of the Company or other person designated by the Company. The Exercise Notice will be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares together with any applicable Tax-Related Items (as defined in Section 8 below). The Option will be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by such aggregate Exercise Price and payment of any applicable Tax-Related Items. No Shares will be issued pursuant to the exercise of the Option unless such issuance and exercise complies with all relevant provisions of law and the requirements of any stock exchange or quotation service upon which the Shares are then listed. Assuming such compliance, for United States income tax purposes the Exercised Shares will be considered transferred to Optionee on the date the Option is exercised with respect to such Exercised Shares.

(c) Exercise by Another. If another person wants to exercise the Option after it has been transferred to him or her in compliance with this Option Agreement, that person must prove to the Company's satisfaction that he or she is entitled to exercise the Option. That person must also complete the proper Exercise Notice form (as described above) and pay the Exercise Price (as described below) and any applicable Tax-Related Items (as described below).

**5. Method of Payment.** Payment of the aggregate Exercise Price will be by any of the following, or a combination thereof, at the election of Optionee:

(a) Optionee's personal check (or readily available funds), wire transfer, or a cashier's check;

(b) certificates for shares of Company stock that Optionee owns, along with any forms needed to effect a transfer of those shares to the Company; the value of the shares, determined as of the effective date of the Option exercise, will be applied to the Exercise Price. Instead of surrendering shares of Company stock, Optionee may attest to the ownership of those shares on a form provided by the Company and have the same number of shares subtracted from the Option shares issued to Optionee. However, Optionee may not surrender, or attest to the ownership of, shares of Company stock in payment of the Exercise Price of Optionee's Option if Optionee's action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to this Option for financial reporting purposes;

(c) cashless exercise through irrevocable directions to a securities broker approved by the Company to sell all or part of the Shares covered by the Option and to deliver to the Company from the sale proceeds an amount sufficient to pay the Exercise Price and any applicable Tax-Related Items. The balance of the sale proceeds, if any, will be delivered to Optionee. The directions must be given by signing a special notice of exercise form provided by the Company; or

(d) any other method authorized by the Company;

provided, however, that the Company may restrict the available methods of payment to facilitate compliance with applicable law or administration of the Plan.

**6. Non-Transferability of Option.** In general, except as provided below, only Optionee may exercise this Option prior to Optionee's death. Optionee may not transfer or assign this Option, except as provided below. For instance, Optionee may not sell this Option or use it as security for a loan. If Optionee attempts to do any of these things, this Option will immediately become invalid. However, if Optionee is a U.S. taxpayer, Optionee may dispose of this Option in Optionee's will. If Optionee is a U.S. taxpayer and this Option is designated as a NSO in the Notice of Grant, then the Committee may, in its sole discretion, allow Optionee to transfer this Option as a gift to one or more family members. For purposes of this Agreement, "family member" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in- law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law (including adoptive relationships), any individual sharing Optionee's household (other than a tenant or employee), a trust in which one or more of these individuals have more than 50% of the beneficial interest, a foundation in which Optionee or one or more of these persons control the management of assets, and any entity in which Optionee or one or more of these persons own more than 50% of the voting interest. In addition, if Optionee is a U.S. taxpayer and this Option is designated as a NSO in the Notice of Grant, then the Committee may, in its sole discretion, allow Optionee to transfer this Option to Optionee's spouse or former spouse pursuant to a domestic relations order in settlement of marital property rights. The Committee will allow Optionee to transfer this Option only if both Optionee and the transferee(s) execute the forms prescribed by the Committee, which include the consent of the transferee(s) to be bound by this Agreement. This Option may not be transferred in any manner other than by will or by the laws of descent or distribution or court order and may be exercised during Optionee's lifetime only by Optionee, Optionee's guardian, or legal representative, as permitted in the Plan and applicable local laws. The terms of the Plan and this Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

**7. Term of Option.** The Option will in any event expire on the expiration date set forth in the Notice, which date is no more than ten (10) years after the Date of Grant (five (5) years after the Date of Grant if this option is designated as an ISO in the Notice of Stock Option Grant and Section 5.3 of the Plan applies).

**8. Taxes.**

(a) Responsibility for Taxes. Optionee acknowledges that, regardless of any action taken by the Company or, if different, a Parent, Subsidiary, or Affiliate employing or retaining Optionee (the "***Employer***"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account, or other tax related items related to Optionee's participation in the Plan

and legally applicable to Optionee ("***Tax-Related Items***") is and remains Optionee's responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. Optionee further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Option, including, but not limited to, the grant, vesting, or exercise of this Option; the subsequent sale of Shares acquired pursuant to such exercise; and the receipt of any dividends; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of this Option to reduce or eliminate Optionee's liability for Tax-Related Items or achieve any particular tax result. Further, if Optionee is subject to Tax-Related Items in more than one jurisdiction, Optionee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction. *OPTIONEE SHOULD CONSULT A TAX ADVISER APPROPRIATELY QUALIFIED IN THE COUNTRY OR COUNTRIES IN WHICH OPTIONEE RESIDES OR IS SUBJECT TO TAXATION.*

(b) Withholding. Prior to any relevant taxable or tax withholding event, as applicable, Optionee agrees to make arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, Optionee authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any withholding obligations for Tax-Related Items by one or a combination of the following, all under such rules as may be established by the Committee and in compliance with the Company's Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable:

(i) withholding from Optionee's wages or other cash compensation paid to Optionee by the Company and/or the Employer; or

(ii) withholding from proceeds of the sale of Shares acquired at exercise of this Option either through a voluntary sale or through a mandatory sale arranged by the Company (on Optionee's behalf pursuant to this authorization and without further consent);

(iii) withholding Shares to be issued upon exercise of the Option, provided the Company only withholds the number of Shares necessary to satisfy no more than applicable statutory withholding amounts;

(iv) Optionee's payment of a cash amount (including by check representing readily available funds or a wire transfer); or

(v) any other arrangement approved by the Committee and permitted under applicable law;

provided, however, that if Optionee is a Section 16 officer of the Company under the Exchange Act, then the method of withholding shall be a mandatory sale (unless the Committee as constituted in accordance with Rule 16b-3 of the Exchange Act shall establish an alternate method from alternatives (i) – (v) above prior to the Tax-Related Items withholding event).

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum permissible statutory rate for Optionee's tax jurisdiction(s) in which case Optionee will have no entitlement to the equivalent amount in Shares and will receive a refund of any over-withheld amount in cash in accordance with applicable law. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Optionee is deemed to have been issued the full number of Exercised Shares; notwithstanding that a number of the Shares are held back solely for the purpose of satisfying the withholding obligation for Tax-Related Items.

Finally, Optionee agrees to pay to the Company and/or the Employer any amount of Tax-Related Items that the Company and/or the Employer may be required to withhold or account for as a result of Optionee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares, if Optionee fails to comply with Optionee's obligations in connection with the Tax-Related Items.

(c) Notice of Disqualifying Disposition of ISO Shares. If Optionee is subject to Tax-Related Items in the United States and sells or otherwise disposes of any of the Shares acquired pursuant to an ISO on or before the later of (i) two (2) years after the grant date, or (ii) one (1) year after the exercise date, Optionee will immediately notify the Company in writing of such disposition. Optionee agrees that he or she may be subject to income tax withholding by the Company on the compensation income recognized from such early disposition of ISO Shares by payment in cash or out any wages or other cash compensation paid to Optionee by the Company and/or the Employer.

**9. Nature of Grant.** By accepting the Option, Optionee acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature, and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the Option is exceptional, voluntary, and occasional, and does not create any contractual or other right to receive future grants of options, or benefits in lieu of options, even if options have been granted in the past;

(c) all decisions with respect to future options or other grants, if any, will be at the sole discretion of the Company;

(d) Optionee is voluntarily participating in the Plan;

(e) the Option and Optionee's participation in the Plan will not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company or the Employer, and will not interfere with the ability of the Company or the Employer, as applicable, to terminate Optionee's employment or service relationship (if any);

(f) the Option and the Shares subject to the Option, and the income and value of same, are not intended to replace any pension rights or compensation;

(g) the Option and the Shares subject to the Option, and the income and value of same, are not part of normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement, or welfare benefits or similar payments;

(h) unless otherwise agreed with the Company, the Option, and the Shares subject to the Option, and the income and value of same, are not granted as consideration for, or in connection with, the service Optionee may provide as a director of a Parent, Subsidiary, or Affiliate;

(i) the future value of the Shares underlying the Option is unknown, indeterminable, and cannot be predicted with certainty; if the underlying Shares do not increase in value, the Option will have no value; if Optionee exercises the Option and acquires Shares, the value of such Shares may increase or decrease, even below the Exercise Price;

(j) no claim or entitlement to compensation or damages will arise from forfeiture of the Option resulting from Optionee's termination of Service (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Optionee is employed or the terms of Optionee's employment agreement, if any), and in consideration of the grant of the Option to which Optionee is otherwise not entitled, Optionee irrevocably agrees never to institute any claim against the Employer, the Company, and any Parent, Subsidiary, or Affiliate; waives his or her ability, if any, to bring any such claim; and releases the Employer, the Company, and any Parent,

Subsidiary, or Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, Optionee will be deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(k) unless otherwise provided in the Plan or by the Company in its discretion, the Option and the benefits evidenced by this Option Agreement do not create any entitlement to have the Option or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any Corporate Transaction affecting the Shares; and

(l) neither the Employer, the Company, or any Parent, Subsidiary or Affiliate will be liable for any foreign exchange rate fluctuation between Optionee's local currency and the United States Dollar that may affect the value of the Option or of any amounts due to Optionee pursuant to the exercise of the Option or the subsequent sale of any Shares acquired upon exercise.

(m) the following provisions apply only if Optionee is providing services outside the United States:

(i) the Option and the Shares subject to the Option are not part of normal or expected compensation or salary for any purpose; and

(ii) Optionee acknowledges and agrees that neither the Company, the Employer nor any Parent or Subsidiary or Affiliate will be liable for any foreign exchange rate fluctuation between Optionee's local currency and the United States Dollar that may affect the value of the Option or of any amounts due to Optionee pursuant to the exercise of the Option or the subsequent sale of any Shares acquired upon exercised

**10. No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Optionee's participation in the Plan or Optionee's acquisition or sale of the underlying Shares. Optionee acknowledges, understands, and agrees that he or she should consult with his or her own personal tax, legal, and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

**11. Language.** If Optionee has received this Option Agreement, or any other document related to the Option and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

**12. Imposition of Other Requirements.** The Company reserves the right to impose other requirements on Optionee's participation in the Plan, on the Option, and on any Shares purchased upon exercise of the Option, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Optionee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

**13. Acknowledgement.** The Company and Optionee agree that the Option is granted under and governed by the Notice, this Option Agreement and the Plan (incorporated herein by reference). Optionee: (a) acknowledges receipt of a copy of the Plan and the Plan prospectus, (b) represents that Optionee has carefully read and is familiar with their provisions, and (c) hereby accepts the Option subject to all of the terms and conditions set forth herein and those set forth in the Plan and the Notice.

**14. Entire Agreement; Enforcement of Rights.** This Option Agreement, the Plan, and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments, or negotiations concerning the purchase of the Shares hereunder are superseded. No adverse modification of, or adverse amendment to, this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing and signed by the parties to this Option Agreement (which writing and signing may be electronic). The failure by either party to enforce any rights under this Option Agreement will not be construed as a waiver of any rights of such party.

**15. Compliance with Laws and Regulations.** The issuance of Shares and the sale of Shares will be subject to and conditioned upon compliance by the Company and Optionee with all applicable state, federal, local and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Shares may be listed or quoted at the time of such issuance or transfer. Optionee understands that the Company is under no obligation to register or qualify the Common Stock with any state, federal, or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the Shares. Further, Optionee agrees that the Company will have unilateral authority to amend the Plan and this Option Agreement without Optionee's consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this Option Agreement will be endorsed with appropriate legends, if any, determined by the Company.

**16. Severability.** If one or more provisions of this Option 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 (a) such provision will be excluded from this Option Agreement, (b) the balance of this Option Agreement will be interpreted as if such provision were so excluded and (c) the balance of this Option Agreement will be enforceable in accordance with its terms.

**17. Governing Law and Venue.** This Option Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto will be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to such state's conflict of laws rules.

Any and all disputes relating to, concerning or arising from this Option Agreement, or relating to, concerning or arising from the relationship between the parties evidenced by the Plan or this Option Agreement, will be brought and heard exclusively in the United States District Court for the State of California or the Superior Court, San Francisco County, California. Each of the parties hereby represents and agrees that such party is subject to the personal jurisdiction of said courts; hereby irrevocably consents to the jurisdiction of such courts in any legal or equitable proceedings related to, concerning, or arising from such dispute, and waives, to the fullest extent permitted by law, any objection which such party may now or hereafter have that the laying of the venue of any legal or equitable proceedings related to, concerning, or arising from such dispute which is brought in such courts is improper or that such proceedings have been brought in an inconvenient forum.

**18. No Rights as Employee, Director or Consultant.** Nothing in this Option Agreement will affect in any manner whatsoever any right or power of the Employer or the Company to terminate Optionee's Service, for any reason, with or without Cause.

**19. Lock-Up Agreement**. In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Optionee hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration), except pursuant to a transfer for no consideration in accordance with Section 6 above, without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed one hundred eighty (180) days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering; provided however that, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the sixteen (16)-day period beginning on the last day of the restricted period, then, upon the request of the managing underwriter, to the extent required by any Financial Industry Regulatory Authority rules, the

restrictions imposed by this Section shall continue to apply until the end of the third trading day following the expiration of the fifteen (15)-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In no event will the restricted period extend beyond two hundred sixteen (216) days after the effective date of the registration statement.

**20. Consent to Electronic Delivery of All Plan Documents and Disclosures.** By Optionee's acceptance of the Notice (whether in writing or electronically), Optionee and the Company agree that the Option is granted under and governed by the terms and conditions of the Plan, the Notice, and this Option Agreement. Optionee has reviewed the Plan, the Notice, and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Notice and Agreement, and fully understands all provisions of the Plan, the Notice, and this Option Agreement. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice, and this Option Agreement. Optionee further agrees to notify the Company upon any change in Optionee's residence address. By acceptance of the Option, Optionee agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company and consents to the electronic delivery of the Notice, this Option Agreement, the Plan, account statements, Plan prospectuses required by the U.S. Securities and Exchange Commission, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its security holders (including, without limitation, annual reports and proxy statements), or other communications or information related to the Option and current or future participation in the Plan. Electronic delivery may include the delivery of a link to the Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail, or such other delivery determined at the Company's discretion. Optionee acknowledges that Optionee may receive from the Company a paper copy of any documents delivered electronically at no cost if Optionee contacts the Company by telephone, through a postal service, or electronic mail to Stock Administration. Optionee further acknowledges that Optionee will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, Optionee understands that Optionee must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. Also, Optionee understands that Optionee's consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if Optionee has provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service, or electronic mail to Stock Administration. Finally, Optionee understands that Optionee is not required to consent to electronic delivery if local laws prohibit such consent.

**21. Insider Trading Restrictions/Market Abuse Laws.** Optionee acknowledges that, depending on Optionee's country, Optionee may be subject to insider trading restrictions and/or market abuse laws, which may affect Optionee's ability to acquire or sell the Shares or rights to Shares under the Plan during such times as Optionee is considered to have "inside information" regarding the Company (as defined by the laws in Optionee's country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Optionee acknowledges that it is Optionee's responsibility to comply with any applicable restrictions and understands that Optionee should consult his or her personal legal advisor on such matters. In addition, Optionee acknowledges that he or she has read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Optionee acquires or disposes of the Company's securities.

**22. Award Subject to Company Clawback or Recoupment.** To the extent permitted by applicable law, the Option will be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Optionee's employment or other Service that is applicable to Optionee. In addition to any other remedies available under such policy and applicable law, the Company may require the cancellation of Optionee's Option (whether vested or unvested) and the recoupment of any gains realized with respect to Optionee's Option.

**BY ACCEPTING THIS OPTION, OPTIONEE AGREES TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.**

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**
**NOTICE OF RESTRICTED STOCK UNIT AWARD**

You (the "***Participant***") have been granted an award of Restricted Stock Units ("***RSUs***") under the Third Harmonic Bio, Inc. (the "***Company***") 2022 Equity Incentive Plan (the "***Plan***"), subject to the terms and conditions of the Plan, this Notice of Restricted Stock Unit Award (the "***Notice***") and the attached Restricted Stock Unit Award Agreement (the "***Agreement***").

Unless otherwise defined herein, the terms defined in the Plan will have the same meanings in this Notice and the electronic representation of this Notice established and maintained by the Company or a third party designated by the Company.

| | |
|---|---|
| **Name:** | |
| **Address:** | |
| **Grant Number:** | |
| **Number of RSUs:** | |
| **Date of Grant:** | |
| **Vesting Commencement Date:** | |
| **Expiration Date:** | The earlier to occur of: (a) the date on which settlement of all RSUs granted hereunder occurs, and (b) the tenth anniversary of the Date of Grant. This RSU expires earlier if Participant's Service terminates earlier, as described in the Agreement. |
| **Vesting Schedule:** | Subject to the limitations set forth in this Notice, the Plan, and the Agreement, the RSUs will vest in accordance with the following schedule: [*insert applicable vesting schedule, which may include performance metrics*] |

By accepting (whether in writing, electronically or otherwise) the RSUs, Participant acknowledges and agrees to the following:

1) Participant understands that Participant's Service is for an unspecified duration, can be terminated at any time (*i.e.*, is "at-will"), except where otherwise prohibited by applicable law, and that nothing in this Notice, the Agreement, or the Plan changes the nature of that relationship. Participant acknowledges that the vesting of the RSUs pursuant to this Notice is subject to Participant's continuing Service. To the extent permitted by applicable law, Participant agrees and acknowledges that the Vesting Schedule may change prospectively in the event that Participant's Service status changes between full- and part-time and/or in the event the Participant is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of Awards or as determined by the Committee.

2) This grant is made under and governed by the Plan, the Agreement, and this Notice, and this Notice is subject to the terms and conditions of the Agreement and the Plan, both of which are incorporated herein by reference. Participant has read the Notice, the Agreement, and the Plan.

3) Participant has read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Participant acquires or disposes of the Company's securities.

4) By accepting the RSUs, Participant consents to electronic delivery and participation as set forth in the Agreement.

**PARTICIPANT**

Signature: _____

Print Name: _____

**THIRD HARMONIC BIO, INC.**

By: _____

Its: _____

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**
**RESTRICTED STOCK UNIT AWARD AGREEMENT**

Unless otherwise defined in this Restricted Stock Unit Award Agreement (this "***Agreement***"), any capitalized terms used herein will have the same meaning ascribed to them in the Third Harmonic Bio, Inc. 2022 Equity Incentive Plan (the "***Plan***").

Participant has been granted Restricted Stock Units ("***RSUs***") subject to the terms, restrictions, and conditions of the Plan, the Notice of Restricted Stock Unit Award (the "***Notice***"), and this Agreement. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of the Notice or this Agreement, the terms and conditions of the Plan will prevail.

**1. Settlement.** Settlement of RSUs shall be made in the same calendar year as the applicable date of vesting under the vesting schedule set forth in the Notice; provided, however, that if a vesting date under the vesting schedule set forth in the Notice occurs in December, then settlement of any RSUs that vest in December shall be made within 30 days of vesting. Settlement of RSUs shall be in Shares. Settlement means the delivery to Participant of the Shares vested under the RSUs. No fractional RSUs or rights for fractional Shares will be created pursuant to this Agreement.

**2. No Stockholder Rights.** Unless and until such time as Shares are issued in settlement of vested RSUs, Participant will have no ownership of the Shares allocated to the RSUs and will have no rights to dividends or to vote such Shares.

**3. Dividend Equivalents.** Dividend equivalents, if any (whether in cash or Shares), will not be credited to Participant, except as permitted by the Committee.

**4. Non-Transferability of RSUs.** The RSUs and any interest therein will not be sold, assigned, transferred, pledged, hypothecated, or otherwise disposed of in any manner other than by will or by the laws of descent or distribution or court order or unless otherwise permitted by the Committee on a case-by-case basis.

**5. Termination; Leave of Absence; Change in Status.** If Participant's Service terminates for any reason, all unvested RSUs will be forfeited to the Company immediately, and all rights of Participant to such RSUs automatically terminate without payment of any consideration to Participant. Participant's Service will be considered terminated as of the date Participant is no longer providing services (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any) and will not, subject to the laws applicable to Participant's Award, be extended by any notice period mandated under local laws (e.g., Service would not include a period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any). Participant acknowledges and agrees that the Vesting Schedule may change prospectively in the event Participant's service status changes between full- and part-time status and/or in the event Participant is on an approved leave of absence in accordance the Company's policies relating to work schedules and vesting of awards or as determined by the Committee. Participant acknowledges that the vesting of the Shares pursuant to this Notice and Agreement is subject to Participant's continued Service. In case of any dispute as to whether termination of Service has occurred, the Committee will have sole discretion to determine whether such termination of Service has occurred and the effective date of such termination (including whether Participant may still be considered to be providing services while on an approved leave of absence).

**6. Taxes.**

(a) Responsibility for Taxes. To the extent permitted by applicable law, Participant acknowledges that, regardless of any action taken by the Company or, if different, a Parent, Subsidiary or Affiliate employing or retaining Participant (the "***Employer***"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to

Participant's participation in the Plan and legally applicable to Participant ("***Tax-Related Items***") is and remains Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant, vesting or settlement of the RSUs and the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction. *PARTICIPANT SHOULD CONSULT A TAX ADVISER APPROPRIATELY QUALIFIED IN THE COUNTRY OR COUNTRIES IN WHICH PARTICIPANT RESIDES OR IS SUBJECT TO TAXATION.*

(b) Withholding. Prior to any relevant taxable or tax withholding event, to the extent permitted by applicable law and as applicable, Participant agrees to make arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any withholding obligations for Tax-Related Items by one or a combination of the following:

(i) withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or the Employer; or

(ii) withholding from proceeds of the sale of Shares acquired upon settlement of the RSUs either through a voluntary sale or through a mandatory sale arranged by the Company (on Participant's behalf pursuant to this authorization and without further consent);

(iii) withholding Shares to be issued upon settlement of the RSUs, provided the Company only withholds the number of Shares necessary to satisfy no more than the maximum applicable statutory withholding amounts;

(iv) Participant's payment of a cash amount (including by check representing readily available funds or a wire transfer); or

(v) any other arrangement approved by the Committee and permitted under applicable law;

all under such rules as may be established by the Committee and in compliance with the Company's Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided however, that if Participant is a Section 16 officer of the Company under the Exchange Act, then the method of withholding shall be a mandatory sale (unless the Committee (as constituted in accordance with Rule 16b-3 under the Exchange Act) shall establish an alternate method prior to the taxable or withholding event).

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum permissible statutory rate for Participant's tax jurisdiction(s) in which case Participant will have no entitlement to the equivalent amount in Shares and will receive a refund of any over-withheld amount in cash in accordance with applicable law. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of the Shares are held back solely for the purpose of satisfying the withholding obligation for Tax-Related Items.

Finally, Participant agrees to pay to the Company and/or the Employer any amount of Tax-Related Items that the Company and/or the Employer may be required to withhold or account for as a result of Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company has no obligation to deliver Shares or proceeds from the sale of Shares to Participant until Participant has satisfied the obligations in connection with the Tax-Related Items as described in this Section.

**7. Nature of Grant.** By accepting the RSUs, Participant acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the RSUs is exceptional, voluntary, and occasional, and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted in the past;

(c) all decisions with respect to future RSUs or other grants, if any, will be at the sole discretion of the Company;

(d) Participant is voluntarily participating in the Plan;

(e) the RSUs and Participant's participation in the Plan will not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company or the Employer and will not interfere with the ability of the Company or the Employer, as applicable, to terminate Participant's employment or service relationship (if any);

(f) the RSUs and the Shares subject to the RSUs, and the income and value of same, are not intended to replace any pension rights or compensation;

(g) the RSUs and the Shares subject to the RSUs, and the income and value of same, are not part of normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement, or welfare benefits or similar payments;

(h) unless otherwise agreed with the Company, the RSUs, and the Shares subject to the RSUs, and the income and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Parent, Subsidiary, or Affiliate;

(i) the future value of the underlying Shares is unknown, indeterminable, and cannot be predicted with certainty;

(j) no claim or entitlement to compensation or damages will arise from forfeiture of the RSUs resulting from Participant's termination of Service (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any), and in consideration of the grant of the RSUs to which Participant is otherwise not entitled, Participant irrevocably agrees never to institute any claim against the Employer, the Company, and any Parent, Subsidiary or Affiliate; waives his or her ability, if any, to bring any such claim; and releases the Employer, the Company, and any Parent, Subsidiary, or Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, Participant will be deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(k) unless otherwise provided in the Plan or by the Company in its discretion, the RSUs and the benefits evidenced by this Agreement do not create any entitlement to have the RSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any Corporate Transaction affecting the Shares; and

(l) the following provisions apply only if Participant is providing services outside the United States:

(i) the RSUs and the Shares subject to the RSUs are not part of normal or expected compensation or salary for any purpose;

(ii) Participant acknowledges and agrees that neither the Company, the Employer nor any Parent or Subsidiary or Affiliate will be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the RSUs or of any amounts due to Participant pursuant to the settlement of the RSUs or the subsequent sale of any Shares acquired upon settlement.

**8. No Advice Regarding Grant.** The Company is not providing any tax, legal, or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant acknowledges, understands and agrees he or she should consult with his or her own personal tax, legal, and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

**9. Language.** If Participant has received this Agreement or any other document related to the RSU and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

**10. Imposition of Other Requirements.** The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the RSUs and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

**11. Acknowledgement.** The Company and Participant agree that the RSUs are granted under and governed by the Notice, this Agreement, and the Plan (incorporated herein by reference). Participant: (a) acknowledges receipt of a copy of the Plan and the Plan prospectus, (b) represents that Participant has carefully read and is familiar with their provisions, and (c) hereby accepts the RSUs subject to all of the terms and conditions set forth herein and those set forth in the Plan and the Notice.

**12. Entire Agreement; Enforcement of Rights.** This Agreement, the Plan, and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments, or negotiations concerning the purchase of the Shares hereunder are superseded. No adverse modification of or adverse amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the parties to this Agreement (which writing and signing may be electronic). The failure by either party to enforce any rights under this Agreement will not be construed as a waiver of any rights of such party.

**13. Compliance with Laws and Regulations.** The issuance of Shares and the sale of Shares will be subject to and conditioned upon compliance by the Company and Participant with all applicable state, federal, local and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Shares may be listed or quoted at the time of such issuance or transfer. Participant understands that the Company is under no obligation to register or qualify the Common Stock with any state, federal, or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the Shares. Further, Participant agrees that the Company will have unilateral authority to amend the Plan and this RSU Agreement without Participant's consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this RSU Agreement will be endorsed with appropriate legends, if any, determined by the Company.

**14. 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 (a) such provision will be excluded from this Agreement, (b) the balance of this Agreement will be interpreted as if such provision were so excluded and (c) the balance of this Agreement will be enforceable in accordance with its terms.

**15. Governing Law and Venue.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto will be governed, construed, and interpreted in accordance with the laws of the State of Delaware, without giving effect to such state's conflict of laws rules.

Any and all disputes relating to, concerning or arising from this Option Agreement, or relating to, concerning or arising from the relationship between the parties evidenced by the Plan or this Option Agreement, will be brought and heard exclusively in the United States District Court for the State of California or the Superior Court in San Francisco County, California. Each of the parties hereby represents and agrees that such party is subject to the personal jurisdiction of said courts; hereby irrevocably consents to the jurisdiction of such courts in any legal or equitable proceedings related to, concerning, or arising from such dispute, and waives, to the fullest extent permitted by law, any objection which such party may now or hereafter have that the laying of the venue of any legal or equitable proceedings related to, concerning, or arising from such dispute which is brought in such courts is improper or that such proceedings have been brought in an inconvenient forum.

**16. No Rights as Employee, Director or Consultant.** Nothing in this Agreement shall create a right to employment or other Service or be interpreted as forming or amending an employment, service contract or relationship with the Company and this Agreement shall not affect in any manner whatsoever any right or power of the Company, or a Parent, Subsidiary or Affiliate, to terminate Participant's Service, for any reason, with or without Cause.

**17. Consent to Electronic Delivery of All Plan Documents and Disclosures.** By Participant's acceptance of the Notice (whether in writing or electronically), Participant and the Company agree that the RSUs are granted under and governed by the terms and conditions of the Plan, the Notice, and this Agreement. Participant has reviewed the Plan, the Notice, and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and Agreement, and fully understands all provisions of the Plan, the Notice, and this Agreement. Participant hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice, and this Agreement. Participant further agrees to notify the Company upon any change in Participant's residence address. By acceptance of the RSUs, Participant agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company and consents to the electronic delivery of the Notice, this Agreement, the Plan, account statements, Plan prospectuses required by the U.S. Securities and Exchange Commission, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its security holders (including, without limitation, annual reports and proxy statements), or other communications or information related to the RSUs and current or future participation in the Plan. Electronic delivery may include the delivery of a link to the Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail, or such other delivery determined at the Company's discretion. Participant acknowledges that Participant may receive from the Company a paper copy of any documents delivered electronically at no cost if Participant contacts the Company by telephone, through a postal service, or electronic mail to Stock Administration. Participant further acknowledges that Participant will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, Participant understands that Participant must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. Also, Participant understands that Participant's consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if Participant has provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service, or electronic mail to Stock Administration. Finally, Participant understands that Participant is not required to consent to electronic delivery if local laws prohibit such consent.

**18. Insider Trading Restrictions/Market Abuse Laws.** Participant acknowledges that, depending on Participant's country of residence, Participant may be subject to insider trading restrictions and/or market abuse laws, which may affect Participant's ability to, directly or indirectly, acquire or sell the Shares or rights to Shares under the Plan during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws in Participant's country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant acknowledges that it is Participant's responsibility to comply with any applicable restrictions and understands that Participant should consult his or her personal legal advisor on such matters. In addition, Participant acknowledges that he or she read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Participant acquires or disposes of the Company's securities.

**19. Code Section 409A.** For purposes of this Agreement, a termination of employment will be determined consistent with the rules relating to a "separation from service" as defined in Section 409A of the Internal Revenue Code and the regulations thereunder ("***Section 409A***"). Notwithstanding anything else provided herein, to the extent any payments provided under this RSU Agreement in connection with Participant's termination of employment constitute deferred compensation subject to Section 409A, and Participant is deemed at the time of such termination of employment to be a "specified employee" under Section 409A, then such payment will not be made or commence until the earlier of (a) the expiration of the six (6) month period measured from Participant's separation from service to the Employer or the Company, or (b) the date of Participant's death following such a separation from service; provided, however, that such deferral will only be effected to the extent required to avoid adverse tax treatment to Participant including, without limitation, the additional tax for which Participant would otherwise be liable under Section 409A(a)(1)(B) in the absence of such a deferral. To the extent any payment under this RSU Agreement may be classified as a "short-term deferral" within the meaning of Section 409A, such payment will be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section 409A. Payments pursuant to this section are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

**20. Lock-Up Agreement**. In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Participant hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration), except pursuant to a transfer for no consideration in accordance with Section 4 above, without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed one hundred eighty (180) days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering; provided however that, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the sixteen (16)-day period beginning on the last day of the restricted period, then, upon the request of the managing underwriter, to the extent required by any Financial Industry Regulatory Authority rules, the restrictions imposed by this Section shall continue to apply until the end of the third trading day following the expiration of the fifteen (15)-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In no event will the restricted period extend beyond two hundred sixteen (216) days after the effective date of the registration statement.

**21. Award Subject to Company Clawback or Recoupment.** To the extent permitted by applicable law, the RSUs will be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Participant's employment or other Service that is applicable to Participant. In addition to any other remedies available under such policy and applicable law, the Company may require the cancellation of Participant's RSUs (whether vested or unvested) and the recoupment of any gains realized with respect to Participant's RSUs.

BY ACCEPTING THIS AWARD OF RSUS, PARTICIPANT AGREES TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

**NOTICE OF PERFORMANCE SHARES AWARD**

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**

Unless otherwise defined herein, the terms defined in the Third Harmonic Bio, Inc. (the "***Company***") 2022 Equity Incentive Plan (the "***Plan***") shall have the same meanings in this Notice of Performance Shares Award (the "***Notice***") and the attached Performance Shares Award Agreement (the "***Performance Shares Agreement***"). You have been granted an award of Shares (the "***Performance Shares Award***") under the Plan subject to the terms and conditions of the Plan, this Notice and the attached Performance Shares Agreement.

| | |
|---|---|
| **Name:** | _____ |
| **Address:** | _____ |
| **Number of Shares:** | _____ |
| **Date of Grant:** | _____ |
| **Fair Market Value on Date of Grant:** | _____ |
| **Vesting Commencement Date:** | _____ |
| **Vesting Schedule:** | Subject to the limitations set forth in this Notice, the Plan and the Performance Shares Agreement, the Shares will vest in accordance with the following schedule:<br>[INSERT VESTING SCHEDULE] |

This Notice may be executed and delivered electronically, whether via the Company's intranet or the Internet site of a third party or via email or any other means of electronic delivery specified by the Company. By accepting the Performance Shares Award, you consent to the electronic delivery and acceptance as further set forth in the Performance Shares Agreement. You acknowledge that the vesting of the Shares subject to the Performance Shares Award pursuant to this Notice is earned only by continuing Service and meeting the performance factors enumerated under the Vesting Schedule above, but you understand that your employment or consulting relationship with the Company or a Parent or Subsidiary is for an unspecified duration and can be terminated at any time, and that nothing in this Notice, the Performance Shares Agreement or the Plan changes the nature of that relationship. By accepting the Performance Shares Award, you and the Company agree that the Performance Shares Award is granted under and governed by the terms and conditions of the Plan, the Notice and the Performance Shares Agreement

| **PARTICIPANT** | **THIRD HARMONIC BIO, INC.** |
|---|---|
| Print Name: _____ | By: _____ |
| Signature: _____ | Its: _____ |

**PERFORMANCE SHARES AGREEMENT**

**THIRD HARMONIC BIO, INC.**
**2022 EQUITY INCENTIVE PLAN**

You have been granted a Performance Shares Award ("***Performance Shares Award***") by Third Harmonic Bio, Inc. (the "***Company***"), subject to the terms, restrictions and conditions of the Company's 2022 Equity Incentive Plan (the "***Plan***"), the Notice of Performance Shares Award ("***Notice***") and this Performance Shares Agreement (this "***Agreement***").

**1. Settlement.** Your Performance Shares Award shall be settled in Shares and the Company's transfer agent shall record ownership of such Shares in your name as soon as reasonably practicable after achievement of the performance factors enumerated under the Vesting Schedule in the Notice.

**2. No Stockholder Rights.** Unless and until you are recorded as the holder of such Shares on the stock records of the Company and its transfer agent, you shall have no right to dividends or to vote Shares.

**3. No-Transfer.** Your interest in this Performance Shares Award shall not be sold, assigned, transferred, pledged, hypothecated, or otherwise disposed of by you or any person whose interest derives from your interest.

**4. Restrictions on Resale**. By signing this Agreement, you agree not to sell any Shares acquired pursuant to the Plan and this Agreement at a time when applicable laws, regulations or Company or underwriter trading policies prohibit exercise or sale. This restriction will apply as long as you are providing Service to the Company or a Subsidiary of the Company.

**5. Termination.** If your Service terminates for any reason, all of your rights under the Plan, this Agreement and the Notice in respect of this Award shall immediately terminate. In case of any dispute as to whether a termination of Service has occurred, the Committee shall have sole discretion to determine whether such termination has occurred and the effective date of such termination.

**6. Tax Consequences.** YOU SHOULD CONSULT A TAX ADVISER BEFORE ACQUIRING THE SHARES IN THE JURISDICTION IN WHICH YOU ARE SUBJECT TO TAX. Shares shall not be issued under this Agreement unless you make arrangements acceptable to the Company to pay any withholding taxes that may be due as a result of the acquisition or vesting of Shares.

**7. Responsibility for Taxes**. Regardless of any action the Company or, if different, your employer (the "***Employer***") takes with respect to any or all income tax, social insurance, payroll tax, fringe benefits tax, payment on account and other tax-related items related to your participation in the Plan and legally applicable to you ("***Tax-Related Items***"), you acknowledge that the ultimate liability for all Tax-Related Items is and remains your responsibility and may exceed the amount actually withheld by the Company or the Employer. You further acknowledge that the Company and the Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Performance Shares Award, including the grant of the Performance Shares Award, the issuance of the Shares subject to the Performance Shares Award, the vesting of such Shares, the subsequent sale of such Shares and the receipt of any dividends; and (b) do not commit to and are under no obligation to structure the terms of the Performance Shares Award to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. You acknowledge that if you are subject to Tax-Related Items in more than one jurisdiction, the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

The Company will only recognize you as a record holder of Shares subject to the Performance Shares Award if you have paid or made, prior to any relevant taxable or tax withholding event, as applicable, adequate arrangements satisfactory to the Company and/or the Employer to satisfy any withholding obligation the Company and/or the Employer may have for Tax-Related Items. In this regard, you authorize the Company and/or the

Employer, and their respective agents, at their discretion, to withhold all applicable Tax-Related Items from your wages or other cash compensation paid to you by the Company and/or the Employer or by withholding from proceeds of the sale of the Shares subject to the Performance Shares Award either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf and you hereby authorize such sale pursuant to this authorization). The Committee may also authorize one or a combination of the following methods to satisfy Tax-Related Items: (a) payment by you to the Company or the Employer of an amount equal to the Tax-Related Items in cash, (b) having the Company withhold Shares subject to the Performance Shares Award that would otherwise be issued to you when they vest having a value equal to the Tax-Related Items to be withheld, (c) delivering to the Company already-owned Shares having a value equal to the Tax-Related Items to be withheld, or (d) any other arrangement approved by the Company and permissible under applicable law; in all cases, under such rules as may be established by the Committee and in compliance with the Company's Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided, however, that if you are a Section 16 officer of the Company under the Exchange Act, then the method of withholding shall be a mandatory sale (unless the Committee shall establish an alternate method prior to the taxable or withholding event). You shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold as a result of your participation in the Plan or the issuance of Shares subject to this Performance Shares Award or vesting thereof that cannot be satisfied by the means previously described.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum applicable rate in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the Shares subject to the Performance Shares Award that would otherwise be released when they vest. If the obligation for Tax-Related Items is satisfied by withholding in Shares that would otherwise be subject to release when they vest, for tax purposes, you are deemed to have been issued the full number of such Shares, notwithstanding that a number of the such Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, you acknowledge that the Company has no obligation to deliver Shares subject to the Performance Shares Award to you until you have satisfied the obligations in connection with the Tax-Related Items as described in this Section.

**8. Acknowledgement.** The Company and you agree that the Performance Shares Award is granted under and governed by the Notice, this Agreement and the provisions of the Plan (incorporated herein by reference). You: (i) acknowledge receipt of a copy of the Plan and the Plan prospectus, (ii) represent that you have carefully read and are familiar with their provisions and the provisions of the Notice and this Agreement, and (iii) hereby accept the Performance Shares Award subject to all of the terms and conditions set forth herein and those set forth in the Plan and the Notice. You hereby agree to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice and this Agreement.

**9. Entire Agreement; Enforcement of Rights.** This Agreement, the Plan and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments or negotiations concerning the purchase of the Shares hereunder are superseded. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing and signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

**10. Stop Transfer Orders**.

(b) Stop-Transfer Notices. You agree that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as the owner or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

**11. Compliance with Laws and Regulations.** The issuance of Shares will be subject to and conditioned upon compliance by the Company and you with all applicable state, federal and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's common stock may be listed or quoted at the time of such issuance or transfer. The Shares issued pursuant to this Agreement shall be endorsed with appropriate legends, if any, determined by the Company.

**12. Governing Law; 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 this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. For purposes of litigating any dispute that may arise directly or indirectly from the Plan, the Notice and this Agreement, the parties hereby submit and consent to litigation in the exclusive jurisdiction of the State of California and agree that any such litigation shall be conducted only in the courts of the State of California in San Francisco County, California or the federal courts of the United States for the State of California and no other courts.

**13. No Rights as Employee, Director or Consultant.** Nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company, or a Parent, Subsidiary or Affiliate of the Company, to terminate your Service, for any reason, with or without Cause.

**14. Consent to Electronic Delivery of All Plan Documents and Disclosures.** By acceptance of this Performance Shares Award, you consent to the electronic delivery of the Notice, this Agreement, the Plan, account statements, Plan prospectuses required by the Securities and Exchange Commission, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its security holders (including, without limitation, annual reports and proxy statements) or other communications or information related to the Performance Shares Award. Electronic delivery may include the delivery of a link to a Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other delivery determined at the Company's discretion. You acknowledge that you may receive from the Company a paper copy of any documents delivered electronically at no cost if you contact the Company by telephone, through a postal service or electronic mail at [insert email]. You further acknowledge that you will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, you understand that you must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. You agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Also, you understand that your consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if you have provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service or electronic mail at [insert email]. Finally, you understand that you are not required to consent to electronic delivery.

**15. Award Subject to Company Clawback or Recoupment.** To the extent permitted by applicable law, Performance Shares Award shall be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or the Committee or required by law during the term of your employment or other Service that is applicable to you. In addition to any other remedies available under such policy, applicable law may require the cancellation of your Performance Shares Award (whether vested or unvested) and the recoupment of any gains realized with respect to your Performance Shares Award.

BY ACCEPTING THE PERFORMANCE SHARES AWARD, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

**THIRD HARMONIC BIO, INC.**

**2022 EMPLOYEE STOCK PURCHASE PLAN**

**1. PURPOSE.** Third Harmonic Bio, Inc. adopted the Plan effective as of the Effective Date. The purpose of this Plan is to provide eligible employees of the Company and the Participating Corporations with a means of acquiring an equity interest in the Company, to enhance such employees' sense of participation in the affairs of the Company. Capitalized terms not defined elsewhere in the text are defined in Section 28.

**2. ESTABLISHMENT OF PLAN.** The Company proposes to grant rights to purchase shares of Common Stock to eligible employees of the Company and its Participating Corporations pursuant to this Plan. The Company intends this Plan to qualify as an "employee stock purchase plan" under Section 423 of the Code (including any amendments to or replacements of such Section), and this Plan shall be so construed, although the Company makes no undertaking or representation to maintain such qualification. Any term not expressly defined in this Plan but defined for purposes of Section 423 of the Code shall have the same definition herein. In addition, with regard to offers of options to purchase shares of Common Stock under the Plan to employees working for a Subsidiary or an Affiliate outside the United States, this Plan authorizes the grant of options under a Non-Section 423 Component that is not intended to meet Section 423 requirements, provided, to the extent necessary under Section 423 of the Code, the other terms and conditions of the Plan are met.

Subject to Section 14, a total of 369,079 shares is reserved for issuance under this Plan. In addition, on each January 1 of each of 2023 through 2032, the aggregate number of shares of Common Stock reserved for issuance under the Plan shall be increased automatically by the number of shares equal to one percent (1%) of the sum of (i) the number of shares of all classes of the Company's common stock, plus (ii) the total number of shares of Company common stock issuable upon conversion of any preferred stock (if any) or exercise of any Pre-Funded Warrants, as issued and outstanding on each December 31 (rounded down to the nearest whole share); provided, that the Board or the Committee may in its sole discretion reduce the amount of the increase in any particular year. Subject to Section 14, no more than 7,381,584 shares of Common Stock may be issued over the term of this Plan. The number of shares initially reserved for issuance under this Plan and the maximum number of shares that may be issued under this Plan shall be subject to adjustments effected in accordance with Section 14. Any or all such shares may be granted under the Section 423 Component.

**3. ADMINISTRATION.** The Plan will be administered by the Committee. Subject to the provisions of this Plan and the limitations of Section 423 of the Code or any successor provision in the Code, all questions of interpretation or application of this Plan shall be determined by the Committee and its decisions shall be final and binding upon all eligible employees and Participants. The Committee will have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to determine eligibility, to designate the Participating Corporations, to determine whether Participating Corporations shall participate in the Section 423 Component or Non-Section 423 Component and to decide upon any and all claims filed under the Plan. Every finding, decision and determination made by the Committee will, to the full extent permitted by law, be final and binding upon all parties. Notwithstanding any provision to the contrary in this Plan, the Committee may adopt rules, sub-plans, and/or procedures relating to the operation and administration of the Plan designed to comply with local laws, regulations or customs or to achieve tax, securities law or other objectives for eligible employees outside of the United States. Further, the Committee is specifically authorized to adopt rules and procedures regarding the application of the definition of compensation to Participants on payrolls outside of the United States, handling of payroll deductions and other contributions, taking of payroll deductions

and making of other contributions to the Plan, establishment of the exchange rate applicable to payroll deductions taken and other contributions made in a currency other than U.S. dollars, obligations to pay payroll tax, determination, tax withholding procedures, that vary with applicable local requirements. The Committee will have the authority to determine the Fair Market Value of the Common Stock (which determination shall be final, binding and conclusive for all purposes) in accordance with Section 8 below and to interpret Section 8 of the Plan in connection with circumstances that impact the Fair Market Value. Members of the Committee shall receive no compensation for their services in connection with the administration of this Plan, other than standard fees as established from time to time by the Board for services rendered by Board members serving on Board committees. All expenses incurred in connection with the administration of this Plan shall be paid by the Company. For purposes of this Plan, the Committee may designate separate offerings under the Plan (the terms of which need not be identical) in which eligible employees of one or more Participating Corporations will participate, and the provisions of the Plan will separately apply to each such separate offering even if the dates of the applicable Offering Periods of each such offering are identical. To the extent permitted by Section 423 of the Code, the terms of each separate offering under the Plan need not be identical, provided that the rights and privileges established with respect to a particular offering are applied in an identical manner to all employees of every Participating Corporation whose employees are granted options under that particular offering. The Committee may establish rules to govern the terms of the Plan and the offering that will apply to Participants who transfer employment between the Company and Participating Corporations or between Participating Corporations, in accordance with requirements under Section 423 of the Code to the extent applicable.

**4. ELIGIBILITY.**

(a) Any employee of the Company or the Participating Corporations is eligible to participate in an Offering Period under this Plan, except that one or more of the following categories of employees may be excluded from coverage under the Plan if determined by the Committee (other than where such exclusion is prohibited by applicable law):

(i) employees who do not meet eligibility requirements that the Committee may choose to impose (within the limits permitted by the Code);

(ii) employees who are not employed by the Company or a Participating Corporation prior to the beginning of such Offering Period or prior to such other time period as specified by the Committee;

(iii) employees who are customarily employed for twenty (20) or less hours per week;

(iv) employees who are customarily employed for five (5) months or less in a calendar year;

(v) (a) employees who are “highly compensated employees” of the Company or any Participating Corporation (within the meaning of Section 414(q) of the Code), or (b) any employees who are “highly compensated employees” with compensation above a specified level, who is an officer and/or is subject to the disclosure requirements of Section 16(a) of the Exchange Act;

(vi) employees who are citizens or residents of a foreign jurisdiction (without regard to whether they are also a citizen of the United States or a resident alien (within the meaning of Section 7701(b)(1)(A) of the Code)) if either (i) such employee’s participation is prohibited under the laws of the jurisdiction governing such employee, or (ii) compliance with the laws of the foreign jurisdiction would violate the requirements of Section 423 of the Code; and

(vii) individuals who provide services to the Company or any of its Participating Corporations who are reclassified as common law employees for any reason except for federal income and employment tax purposes.

The foregoing notwithstanding, an individual shall not be eligible if his or her participation in the Plan is prohibited by the law of any country that has jurisdiction over him or her, if complying with the laws of the applicable country would cause the Plan to violate Section 423 of the Code, or if he or she is subject to a collective bargaining agreement that does not provide for participation in the Plan.

(b) No employee who, together with any other person whose stock would be attributed to such employee pursuant to Section 424(d) of the Code, owns stock or holds options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or its Parent or Subsidiary or who, as a result of being granted an option under this Plan with respect to such Offering Period, would own stock or hold options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or its Parent or Subsidiary shall be granted an option to purchase Common Stock under the Plan. Notwithstanding the foregoing, the rules of Section 424(d) of the Code shall apply in determining share ownership and the extent to which shares held under outstanding equity awards are to be treated as owned by the employee.

**5. OFFERING DATES.**

(a) Each Offering Period of this Plan may be of up to twenty-seven (27) months duration and shall commence and end at the times designated by the Committee. Each Offering Period shall consist of one or more Purchase Periods during which Contributions made by Participants are accumulated under this Plan.

(b) The initial Offering Period shall commence on a date selected by the Committee. The initial Offering Period shall consist of one six-month Purchase Period (except as otherwise provided by the Committee). Thereafter, a new Offering Period shall commence on such dates as are specified by the Committee, with each such Offering Period also consisting of a six (6)-month Purchase Period, except as otherwise provided by an applicable sub-plan, or on such other date determined by the Committee. The Committee may at any time establish a different duration for an Offering Period or Purchase Period to be effective after the next scheduled Purchase Date, up to a maximum duration of twenty-seven (27) months.

**6. PARTICIPATION IN THIS PLAN.**

(a) Any employee who is an eligible employee determined in accordance with Section 4 immediately prior to an Offering Period will be eligible to participate in this Plan, subject to the requirement of Section 6(b) hereof and the other terms and provisions of this Plan.

(b) With respect to any Offering Period under this Plan, a Participant may elect to participate in this Plan by submitting an enrollment agreement prior to the commencement of such Offering Period (or such earlier date as the Committee may determine) to which such agreement relates, subject to the other terms and provisions of this Plan and in accordance with such rules as the Committee may determine.

(c) Once an employee becomes a Participant in an Offering Period, then such Participant will automatically participate in each subsequent Offering Period commencing immediately following the last day of the prior Offering Period unless the Participant withdraws or is deemed to withdraw from this Plan or terminates further participation in an Offering Period as set forth in Section 11 below. A Participant who is continuing participation pursuant to the preceding sentence is not required to file any additional enrollment agreement in order to continue participation in this Plan; a Participant who is not continuing participation pursuant to the preceding sentence is required to file an enrollment agreement prior to the commencement of the Offering Period (or such earlier date as the Committee may determine) to which such agreement relates.

**7. GRANT OF OPTION ON ENROLLMENT.** Becoming a Participant with respect to an Offering Period will constitute the grant (as of the Offering Date) by the Company to such Participant of an option to purchase on the Purchase Date up to that number of shares of Common Stock determined by a fraction, the numerator of which is the amount accumulated in such Participant's Contribution account during such Purchase Period and the denominator of which is the lower of (i) eighty-five percent (85%) of the Fair Market Value of a share of Common Stock on the Offering Date (but in no event less than the par value of a share of the Common Stock), or (ii) eighty-five percent (85%) of the Fair Market Value of a share of the Common Stock on the Purchase Date; provided that the number of shares of Common Stock subject to any option granted pursuant to this Plan shall not exceed the lesser of (x) the maximum number of shares set by the Committee pursuant to Section 10(b) below with respect to the applicable Purchase Date, or (y) the maximum number of shares which may be purchased pursuant to Section 10(a) below with respect to the applicable Purchase Date.

**8. PURCHASE PRICE.** The Purchase Price per share at which a share of Common Stock will be sold in any Offering Period shall be eighty-five percent (85%) of the lesser of:

(a) The Fair Market Value on the Offering Date; or

(b) The Fair Market Value on the Purchase Date.

**9. PAYMENT OF PURCHASE PRICE; CONTRIBUTION CHANGES; SHARE ISSUANCES.**

(a) The Purchase Price shall be accumulated by regular payroll deductions made during each Offering Period, unless the Committee determines that contributions may be made in another form (including but not limited to with respect to categories of Participants outside the United States that Contributions may be made in another form due to local legal requirements). The Contributions are made as a percentage of the Participant's Compensation in one percent (1%) increments not less than one percent (1%), nor greater than fifteen percent (15%) or such lower limit set by the Committee. "***Compensation***" shall mean base salary or regular hourly wages; however, the Committee shall have discretion to adopt a definition of Compensation from time to time of all cash compensation reported on the employee's Form W-2 or corresponding local country tax return, including without limitation base salary or regular hourly wages, bonuses, incentive compensation, commissions, overtime, shift premiums, pay during leaves of absence, and draws against commissions (or in foreign jurisdictions, equivalent cash compensation). For purposes of determining a Participant's Compensation, any election by such Participant to reduce his or her regular cash remuneration under Sections 125 or 401(k) of the Code (or in foreign jurisdictions, equivalent deductions) shall be treated as if the Participant did not make such election. Contributions shall commence on the first payday following the last Purchase Date and shall continue to the end of the Offering Period unless sooner altered or terminated as provided in this Plan. Notwithstanding the foregoing, the terms of any sub-plan may permit matching shares without the payment of any purchase price.

(b) A Participant may decrease the rate of Contributions during an Offering Period by filing with the Company or a third party designated by the Company a new authorization for Contributions, with the new rate to become effective no later than the second payroll period commencing after the Company's receipt of the authorization and continuing for the remainder of the Offering Period unless changed as described below. A decrease in the rate of Contributions may be made once during any Offering Period, or more frequently under rules determined by the Committee. A Participant may increase or decrease the rate of Contributions for any subsequent Offering Period by filing with the Company or a third party designated by the Company a new authorization for Contributions prior to the beginning of such Offering Period, or such other time period as specified by the Committee.

(c) A Participant may reduce his or her Contribution percentage to zero during an Offering Period by filing with the Company or a third party designated by the Company a request for cessation of Contributions. Such reduction shall be effective beginning no later than the second payroll period after the Company's receipt of the request and no further Contributions will be made for the duration of the Offering Period. Contributions credited to the Participant's account prior to the effective date of the request shall be used to purchase shares of Common Stock in accordance with Subsection (e) below. A reduction of the Contribution percentage to zero shall be treated as such Participant's withdrawal from such Offering Period and the Plan, effective as of the day after the next Purchase Date following the filing date of such request with the Company.

(d) All Contributions made for a Participant are credited to his or her book account under this Plan and are deposited with the general funds of the Company, except to the extent local legal restrictions outside the United States require segregation of such Contributions. No interest accrues on the Contributions, except to the extent required due to local legal requirements. All Contributions received or held by the Company may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such Contributions, except to the extent necessary to comply with local legal requirements outside the United States.

(e) On each Purchase Date, so long as this Plan remains in effect and provided that the Participant has not submitted a signed and completed withdrawal form before that date which notifies the Company that the Participant wishes to withdraw from that Offering Period under this Plan and have all Contributions accumulated in the account maintained on behalf of the Participant as of that date returned to the Participant, the Company shall apply the funds then in the Participant's account to the purchase of whole shares of Common Stock reserved under the option granted to such Participant with respect to the Offering Period to the extent that such option is exercisable on the Purchase Date. The Purchase Price per share shall be as specified in Section 8 of this Plan. Any fractional share, as calculated under this Subsection (e), shall be rounded down to the next lower whole share, unless the Committee determines with respect to all Participants that any fractional share shall be credited as a fractional share. Any amount remaining in a Participant's account on a Purchase Date which is less than the amount necessary to purchase a full share of Common Stock will be carried forward into the next Purchase Period or Offering Period, as the case may be (except to the extent required due to local legal requirements outside the United States), unless otherwise required to be refunded or returned to Participant pursuant to this Section 9(e), Section 10(d), Section 11(b), Section 12, Section 13, or as otherwise provided by this Plan; provided, however, the Committee may determine for future Offering Periods that such amounts shall be carried forward without interest (except to the extent necessary to comply with local legal requirements outside the United States) into the next Purchase Period. In the event that this Plan has been oversubscribed, all funds not used to purchase shares on the Purchase Date shall be returned to the Participant, without interest (except to the extent required due to local legal requirements outside the United States). No Common Stock shall be purchased on a Purchase Date on behalf of any employee whose participation in this Plan has terminated prior to such Purchase Date, except to the extent required due to local legal requirements outside the United States.

(f) As promptly as practicable after the Purchase Date, the Company shall issue shares for the Participant's benefit representing the shares purchased upon exercise of his or her option.

(g) During a Participant's lifetime, his or her option to purchase shares hereunder is exercisable only by him or her. The Participant will have no interest or voting right in shares covered by his or her option until such option has been exercised.

(h) To the extent required by applicable federal, state, local or foreign law, a Participant shall make arrangements satisfactory to the Company and the Participating Corporation employing the Participant for the satisfaction of any withholding tax obligations that arise in connection with the Plan. The Company or any Subsidiary or Affiliate, as applicable, may withhold, by any method permissible under the applicable law, the amount necessary for the Company or Subsidiary or Affiliate, as applicable, to meet applicable withholding obligations, including any withholding required to make available to the Company or Subsidiary or Affiliate, as applicable, any tax deductions or benefits attributable to the sale or early disposition of shares of Common Stock by a Participant. The Company shall not be required to issue any shares of Common Stock under the Plan until such obligations are satisfied.

**10. LIMITATIONS ON SHARES TO BE PURCHASED.**

(a) Any other provision of the Plan notwithstanding, no Participant shall purchase Common Stock with a Fair Market Value in excess of the following limit:

(i) In the case of Common Stock purchased during an Offering Period that commenced in the current calendar year, the limit shall be equal to (A) $25,000 minus (B) the Fair Market Value of the Common Stock that the Participant previously purchased in the current calendar year (under this Plan and all other employee stock purchase plans of the Company or any Parent or Subsidiary).

(ii) In the case of Common Stock purchased during an Offering Period that commenced in the immediately preceding calendar year, the limit shall be equal to (A) $50,000 minus (B) the Fair Market Value of the Common Stock that the Participant previously purchased (under this Plan and all other employee stock purchase plans of the Company or any Parent or Subsidiary) in the current calendar year and in the immediately preceding calendar year.

(iii) In the case of Common Stock purchased during an Offering Period that commenced two calendar years prior, the limit shall be equal to (A) $75,000 minus (B) the Fair Market Value of the Common Stock that the Participant previously purchased (under this Plan and all other employee stock purchase plans of the Company or any Parent or Subsidiary) in the current calendar year and in the two immediately preceding calendar years.

For purposes of this Subsection (a), the Fair Market Value of Common Stock shall be determined in each case as of the beginning of the Offering Period in which such Common Stock is purchased. Employee stock purchase plans not described in Section 423 of the Code shall be disregarded. If a Participant is precluded by this Subsection (a) from purchasing additional Common Stock under the Plan, then his or her Contributions shall automatically be discontinued and shall automatically resume at the beginning of the earliest Purchase Period that will end in the next calendar year (if he or she then is an eligible employee), provided that when the Company automatically resumes such Contributions, the Company must apply the rate in effect immediately prior to such suspension.

(b) In no event shall a Participant be permitted to purchase more than 3,000 shares on any one Purchase Date or such lesser number as the Committee shall determine. If a lower limit is set under this Subsection (b), then all Participants will be notified of such limit prior to the commencement of the next Offering Period for which it is to be effective.

(c) If the number of shares to be purchased on a Purchase Date by all Participants exceeds the number of shares then available for issuance under this Plan, then the Company will make a pro rata allocation of the remaining shares in as uniform a manner as shall be reasonably practicable and as the Committee shall determine to be equitable. In such event, the Company will give notice of such reduction of the number of shares to be purchased under a Participant's option to each Participant affected.

(d) Any Contributions accumulated in a Participant's account which are not used to purchase stock due to the limitations in this Section 10, and not covered by Section 9(e), shall be returned to the Participant as soon as practicable after the end of the applicable Purchase Period, without interest (except to the extent required due to local legal requirements outside the United States).

**11. WITHDRAWAL.**

(a) Each Participant may withdraw from an Offering Period under this Plan pursuant to a method specified for such purpose by the Company. Such withdrawal may be elected at any time prior to the end of an Offering Period, or such other time period as specified by the Committee.

(b) Upon withdrawal from this Plan, the accumulated Contributions shall be returned to the withdrawn Participant, without interest (except to the extent required due to local legal requirements outside the United States), and his or her interest in this Plan shall terminate. In the event a Participant voluntarily elects to withdraw from this Plan, he or she may not resume his or her participation in this Plan during the same Offering Period, but he or she may participate in any Offering Period under this Plan which commences on a date subsequent to such withdrawal by filing a new authorization for Contributions in the same manner as set forth in Section 6 above for initial participation in this Plan

(c) To the extent applicable, if the Fair Market Value on the first day of the current Offering Period in which a Participant is enrolled is higher than the Fair Market Value on the last day of any applicable Purchase Period, (1) the Company will automatically withdraw the Participant from the prior Offering Period and the Participant will be automatically enrolled in a new Offering Period, (2) the old Offering Period is terminated and (3) any funds accumulated in a Participant's account prior to the first day of such new Offering Period will be applied to the purchase of shares on the Purchase Date preceding the first day of such new Offering Period.

**12. TERMINATION OF EMPLOYMENT.** Termination of a Participant's employment for any reason, including retirement, death, disability, or the failure of a Participant to remain an eligible employee of the Company or of a Participating Corporation, immediately terminates his or her participation in this Plan (except as required due to local legal requirements outside the United States). In such event, accumulated Contributions credited to the Participant's account will be returned to him or her or, in the case of his or her death, to his or her legal representative, without interest (except to the extent required due to local legal requirements outside the United States). For purposes of this Section 12, an employee will not be deemed to have terminated employment or failed to remain in the continuous employ of the Company or of a Participating Corporation in the case of sick leave, military leave, or any other leave of absence approved by the Company; provided that such leave is for a period of not more than ninety (90) days or reemployment upon the expiration of such leave is guaranteed by contract or statute. The Company will have sole discretion to determine whether a Participant has terminated employment and the effective date on which the Participant terminated employment, regardless of any notice period or garden leave required under local law.

**13. RETURN OF CONTRIBUTIONS.** In the event a Participant's interest in this Plan is terminated by withdrawal, termination of employment or otherwise, or in the event this Plan is terminated by the Board, the Company shall deliver to the Participant all accumulated Contributions credited to such Participant's account. No interest shall accrue on the Contributions of a Participant in this Plan (except to the extent required due to local legal requirements outside the United States).

**14. CAPITAL CHANGES.** If the number and class of outstanding shares is changed by a stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification or similar change in the capital structure of the Company, without consideration, then the Committee shall adjust the number and class of Common Stock that may be delivered under the Plan, the Purchase Price per share and the number of shares of Common Stock covered by each option under the Plan which has not yet been exercised, and the numerical limits of Sections 2 and 10 shall be proportionately adjusted, subject to any required action by the Board or the stockholders of the Company and in compliance with the applicable securities laws; provided that fractions of a share will not be issued.

**15. NONASSIGNABILITY.** Neither Contributions credited to a Participant's account nor any rights with regard to the exercise of an option or to receive shares under this Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 22 below) by the Participant. Any such attempt at assignment, transfer, pledge or other disposition shall be void and without effect.

**16. USE OF PARTICIPANT FUNDS AND REPORTS.** The Company may use all Contributions received or held by it under the Plan for any corporate purpose, and the Company will not be required to segregate Participant Contributions (except to the extent required due to local legal requirements outside the United States). Until shares are issued, Participants will only have the rights of an unsecured creditor unless otherwise required under local law. Each Participant shall receive, or have access to, promptly after the end of each Purchase Period a report of his or her account setting forth the total Contributions accumulated, the number of shares purchased, the per share price thereof and the remaining cash balance, if any, carried forward to the next Purchase Period or Offering Period, as the case may be.

**17. NOTICE OF DISPOSITION.** Each U.S. taxpayer Participant shall notify the Company in writing if the Participant disposes of any of the shares purchased in any Offering Period pursuant to this Plan if such disposition occurs within two (2) years from the Offering Date or within one (1) year from the Purchase Date on which such shares were purchased (the "***Notice Period***"). The Company may, at any time during the Notice Period, place a legend or legends on any certificate representing shares acquired pursuant to this Plan requesting the Company's transfer agent to notify the Company of any transfer of the shares. The obligation of the Participant to provide such notice shall continue notwithstanding the placement of any such legend on the certificates.

**18. NO RIGHTS TO CONTINUED EMPLOYMENT.** Neither this Plan nor the grant of any option hereunder shall confer any right on any employee to remain in the employ of the Company or any Participating Corporation, or restrict the right of the Company or any Participating Corporation to terminate such employee's employment.

**19. EQUAL RIGHTS AND PRIVILEGES.** All eligible employees granted an option under the Section 423 Component of this Plan shall have equal rights and privileges with respect to this Plan or within any separate offering under the Plan so that this Plan qualifies as an "employee stock purchase plan" within the meaning of Section 423 or any successor provision of the Code and the related regulations. Any provision of this Plan which is inconsistent with Section 423 or any successor provision of the Code, without further act or amendment by the Company, the Committee or the Board, shall be reformed to comply with the requirements of Section 423. This Section 19 shall take precedence over all other provisions in this Plan.

**20. NOTICES.** All notices or other communications by a Participant to the Company under or in connection with this Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

**21. TERM; STOCKHOLDER APPROVAL.** This Plan will become effective on the Effective Date. This Plan shall be approved by the stockholders of the Company, in any manner permitted by applicable corporate law, within twelve (12) months before or after the date this Plan is adopted by the Board. No purchase of shares that are subject to such stockholder approval before becoming available under this Plan shall occur prior to stockholder approval of such shares and the Board or Committee may delay any Purchase Date and postpone the commencement of any Offering Period subsequent to such Purchase Date as deemed necessary or desirable to obtain such approval (provided that if a Purchase Date would occur more than six (6) months after commencement of the Offering Period to which it relates, then such Purchase Date shall not occur and instead such Offering Period shall terminate without the purchase of such shares and Participants in such Offering Period shall be refunded their Contributions without interest). This Plan shall continue until the earlier to occur of (a) termination of this Plan by the Board (which termination may be effected by the Board at any time pursuant to Section 25 below), (b) issuance of all of the shares of Common Stock reserved for issuance under this Plan, or (c) the tenth anniversary of the Effective Date.

**22. DESIGNATION OF BENEFICIARY.**

(a) If authorized by the Committee, a Participant may file a written designation of a beneficiary who is to receive any cash from the Participant's account under this Plan in the event of such Participant's death prior to a Purchase Date. Such form shall be valid only if it was filed with the Company at the prescribed location before the Participant's death.

(b) If authorized by the Company, such designation of beneficiary may be changed by the Participant at any time by written notice filed with the Company at the prescribed location before the Participant's death. In the event of the death of a Participant and in the absence of a beneficiary validly designated under this Plan who is living at the time of such Participant's death, the Company shall deliver such cash to the executor or administrator of the estate of the Participant or to the legal heirs of the Participant.

**23. CONDITIONS UPON ISSUANCE OF SHARES; LIMITATION ON SALE OF SHARES.** Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the U.S. Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange or automated quotation system upon which the shares may then be listed, exchange control restrictions and/or securities law restrictions outside the United States, and shall be further subject to the approval of counsel for the Company with respect to such compliance. Shares may be held in trust or subject to further restrictions as permitted by any subplan.

**24. APPLICABLE LAW.** The Plan shall be governed by the substantive laws (excluding the conflict of laws rules) of the State of Delaware.

**25. AMENDMENT OR TERMINATION.** The Committee, in its sole discretion, may amend, suspend, or terminate the Plan, or any part thereof, at any time and for any reason. Unless otherwise required by applicable law, if the Plan is terminated, the Committee, in its discretion, may elect to terminate all outstanding Offering Periods either immediately or upon completion of the purchase of shares of Common Stock on the next Purchase Date (which may be sooner than originally scheduled, if determined by the Committee in its discretion), or may elect to permit Offering Periods to expire in accordance with their terms (and subject to any adjustment pursuant to Section 14). If an Offering Period is terminated prior to its previously-scheduled expiration, all amounts then credited to Participants' accounts for such Offering Period, which have not been used to purchase shares of Common Stock, shall be returned to those Participants (without interest thereon, except as otherwise required under local laws) as soon as administratively practicable. Further, the Committee will be entitled to change the Purchase Periods and Offering Periods, limit the frequency and/or number of changes in the amount contributed during an Offering Period, establish the exchange ratio applicable to amounts contributed in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a Participant in order to adjust for delays or mistakes in the administration of the Plan, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts contributed from the Participant's base salary and other eligible compensation, and establish such other limitations or procedures as the Committee determines in its sole discretion advisable which are consistent with the Plan. Such actions will not require stockholder approval or the consent of any Participants. However, no amendment shall be made without approval of the stockholders of the Company (obtained in accordance with Section 21 above) within twelve (12) months of the adoption of such amendment (or earlier if required by Section 21) if such amendment would: (a) increase the number of shares that may be issued under this Plan; or (b) change the designation of the employees (or class of employees) eligible for participation in this Plan. In addition, in the event the Board or Committee determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Board or Committee may, in its discretion and, to the extent necessary or desirable, modify, amend or terminate the Plan to reduce or eliminate such accounting consequences including, but not limited to: (i) amending the definition of compensation, including with respect to an Offering Period underway at the time; (ii) altering the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price; (iii) shortening any Offering Period by setting a Purchase Date, including an Offering Period underway at the time of the Committee's action; (iv) reducing the maximum percentage of Compensation a participant may elect to set aside as Contributions; and (v) reducing the maximum number of shares a Participant may purchase during any Offering Period. Such modifications or amendments will not require approval of the stockholders of the Company or the consent of any Participants.

**26. CORPORATE TRANSACTIONS.** In the event of a Corporate Transaction, the Offering Period for each outstanding right to purchase Common Stock will be shortened by setting a new Purchase Date and will end on the new Purchase Date. The new Purchase Date shall occur on or prior to the consummation of the Corporate Transaction, as determined by the Board or Committee, and the Plan shall terminate on the consummation of the Corporate Transaction.

**27. CODE SECTION 409A; TAX QUALIFICATION.**

(a) Options granted under the Plan generally are exempt from the application of Section 409A of the Code. However, options granted to U.S. taxpayers which are not intended to meet the Code Section 423 requirements are intended to be exempt from the application of Section 409A of the Code under the short-term deferral exception and any ambiguities shall be construed and interpreted in accordance with such intent. Subject to Subsection (b), options granted to U.S. taxpayers outside of the Code Section 423 requirements shall be subject to such terms and conditions that will permit such options

to satisfy the requirements of the short-term deferral exception available under Section 409A of the Code, including the requirement that the shares of Common Stock subject to an option be delivered within the short-term deferral period. Subject to Subsection (b), in the case of a Participant who would otherwise be subject to Section 409A of the Code, to the extent the Committee determines that an option or the exercise, payment, settlement or deferral thereof is subject to Section 409A of the Code, the option shall be granted, exercised, paid, settled or deferred in a manner that will comply with Section 409A of the Code, including Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding the foregoing, the Company shall have no liability to a Participant or any other party if the option that is intended to be exempt from or compliant with Section 409A of the Code is not so exempt or compliant or for any action taken by the Committee with respect thereto.

(b) Although the Company may endeavor to (i) qualify an option for favorable tax treatment under the laws of the United States or jurisdictions outside of the United States or (ii) avoid adverse tax treatment (*e.g.*, under Section 409A of the Code), the Company makes no representation to that effect and expressly disavows any covenant to maintain favorable or avoid unfavorable tax treatment, notwithstanding anything to the contrary in this Plan, including Subsection (a). The Company shall be unconstrained in its corporate activities without regard to the potential negative tax impact on Participants under the Plan.

**28. DEFINITIONS.**

(a) "***Affiliate***" means any entity, other than a Subsidiary or Parent, (i) that, directly or indirectly, is controlled by, controls or is under common control with, the Company and (ii) in which the Company has a significant equity interest, in either case as determined by the Committee, whether now or hereafter existing.

(b) "***Board***" shall mean the Board of Directors of the Company.

(c) "***Code***" shall mean the U.S. Internal Revenue Code of 1986, as amended.

(d) "***Committee***" shall mean the Compensation Committee of the Board that consists exclusively of one or more members of the Board appointed by the Board.

(e) "***Common Stock***" shall mean the common stock of the Company.

(f) "***Company***" shall mean Third Harmonic Bio, Inc.

(g) "***Contributions***" means payroll deductions taken from a Participant's Compensation and used to purchase shares of Common Stock under the Plan and, to the extent payroll deductions are not permitted by applicable laws (as determined by the Committee in its sole discretion) contributions by other means, provided, however, that allowing such other contributions does not jeopardize the qualification of the Plan as an "employee stock purchase plan" under Section 423 of the Plan.

(h) "***Corporate Transaction***" means the occurrence of any of the following events: (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or (ii) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; or (iii) the consummation of a merger or

consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

(i) "***Effective Date***" shall mean the date on which the Registration Statement covering the initial public offering of the shares of Common Stock is declared effective by the U.S. Securities and Exchange Commission.

(j) "***Exchange Act***" means the U.S. Securities Exchange Act of 1934, as amended.

(k) "***Fair Market Value***" shall mean, as of any date, the value of a share of Common Stock determined as follows:

(1) if such Common Stock is then quoted on the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market (collectively, the "***Nasdaq Market***"), its closing price on the Nasdaq Market on the date of determination, or if there are no sales for such date, then the last preceding business day on which there were sales, as reported in *The Wall Street Journal* or such other source as the Board or the Committee deems reliable;

(2) if such Common Stock is publicly traded and is then listed on a national securities exchange, its closing price on the date of determination on the principal national securities exchange on which the Common Stock is listed or admitted to trading as reported in *The Wall Street Journal* or such other source as the Board or the Committee deems reliable;

(3) if such Common Stock is publicly traded but is neither quoted on the Nasdaq Market nor listed or admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of determination as reported in *The Wall Street Journal* or such other source as the Board or the Committee deems reliable;

(4) if none of the foregoing is applicable, by the Board or the Committee in good faith.

(l) "***Non-Section 423 Component***" means the part of the Plan which is not intended to meet the requirements set forth in Section 423 of the Code.

(m) "***Notice Period***" shall mean within two (2) years from the Offering Date or within one (1) year from the Purchase Date on which such shares were purchased.

(n) "***Offering Date***" shall mean the first business day of each Offering Period.

(o) "***Offering Period***" shall mean a period with respect to which the right to purchase Common Stock may be granted under the Plan, as determined by the Committee pursuant to Section 5(a).

(p) "***Parent***" shall have the same meaning as "parent corporation" in Sections 424(e) and 424(f) of the Code.

(q) "***Participant***" shall mean an eligible employee who meets the eligibility requirements set forth in Section 4 and who elects to participate in this Plan pursuant to Section 6(b).

(r) "***Participating Corporation***" shall mean any Parent, Subsidiary or Affiliate that the Committee designates from time to time as eligible to participate in this Plan. For purposes of the Section 423 Component, only the Parent and Subsidiaries may be Participating Corporations, provided, however, that at any given time a Parent or Subsidiary that is a Participating Corporation under the Section 423 Component shall not be a Participating Corporation under the Non-Section 423 Component. The Committee may provide that any Participating Corporation shall only be eligible to participate in the Non-Section 423 Component.

(s) "***Plan***" shall mean this Third Harmonic Bio, Inc. 2022 Employee Stock Purchase Plan, as may be amended from time to time.

(t) "***Pre-Funded Warrant***" mean any warrant to acquire shares of Company common stock for a nominal exercise price.

(u) "***Purchase Date***" shall mean the last business day of each Purchase Period.

(v) "***Purchase Period***" shall mean a period during which Contributions may be made toward the purchase of Common Stock under the Plan, as determined by the Committee pursuant to Section 5(b).

(w) "***Purchase Price***" shall mean the price at which Participants may purchase shares of Common Stock under the Plan, as determined pursuant to Section 8.

(x) "***Section 423 Component***" means the part of the Plan, which excludes the Non-Section 423 Component, pursuant to which options to purchase shares of Common Stock under the Plan that satisfy the requirements for "employee stock purchase plans" set forth in Section 423 of the Code may be granted to eligible employees.

(y) "***Subsidiary***" shall have the same meaning as "subsidiary corporation" in Sections 424(e) and 424(f) of the Code.

*Capitalized terms used but not otherwise defined herein shall have the meaning given to them in the ESPP.*

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| SECTION 1:<br>**ACTIONS** | **CHECK DESIRED ACTION:**<br>☐ Enroll in the ESPP<br>☐ Elect / Change Contribution Percentage<br>☐ Discontinue/Withdraw from ESPP | **AND COMPLETE SECTIONS:**<br>2 + 3 + 4 + 9<br>2 + 4 + 9<br>2 + 5 + 9 |
| SECTION 2:<br>**PERSONAL DATA** | Name: _____<br>Home Address: _____<br>_____<br>Employee ID: _____ | |
| SECTION 3:<br>**ENROLL** | ☐ I hereby elect to participate in the Company's 2022 Employee Stock Purchase Plan (the "***ESPP***"), effective at the beginning of the next Offering Period. I elect to purchase shares of Common Stock of the Company pursuant to the terms and conditions of the ESPP and this Enrollment/Change Form. I understand that the shares purchased on my behalf will be issued in street name and deposited directly into my brokerage account. I hereby agree to take all steps, and sign all forms, required to establish an account with the Company's broker for this purpose.<br><br>My participation will continue as long as I remain eligible, unless I withdraw from the ESPP by filing a new Enrollment/Change Form with the Company or any third party designated by the Company. I understand that I must notify the Company of any disposition of shares purchased under the ESPP. | |
| SECTION 4:<br>**ELECT/CHANGE CONTRIBUTION PERCENTAGE** | I hereby authorize the Company to withhold from each of my paychecks such amount as is necessary to equal at the end of the applicable Purchase Period ___% of my compensation (base salary) paid during such Purchase Period, as long as I continue to participate in the ESPP. My contributions, plus any accumulated contributions thus far during the current Purchase Period if this is a change, will be applied to the purchase of shares of Common Stock pursuant to the ESPP. **The percentage must be a whole number (from 1% up to a maximum of 15% contribution).**<br><br>If this is a change to my current enrollment, this represents an ☐-increase ☐-decrease to my contribution percentage.<br><br>**Note:** You may not increase your contributions at any time within an ongoing Offering Period. An increase in your contribution percentage can only take effect with the next Offering Period. You may decrease your contribution percentage to a percentage other than 0% only twice within an Offering Period to be effective during that Offering Period. A change will become effective as soon as reasonably practicable after the form is received by the Company. | |

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| SECTION 5:<br><br>**WITHDRAW FROM ESPP / DISCONTINUE CONTRIBUTIONS** | ***DO <u>NOT</u> CHECK THE BOX BELOW IF YOU WISH TO CONTINUE TO PARTICIPATE IN THE ESPP***<br><br>☐ I hereby elect to withdraw from the ESPP and <u>stop my contributions under the ESPP</u>, effective as soon as reasonably practicable after this form is received by the Company. Accumulated contributions will be returned to me without interest, pursuant to Section 11 of the ESPP.<br><br>**Note:**No future contributions will be made if you elect to withdraw from the ESPP. You may enroll in subsequent Offering Periods. |
| SECTION 6:<br><br>**COMPLIANCE WITH LAW** | Unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of Common Stock the Company shall not be required to deliver any shares under the ESPP prior to the completion of any registration or qualification of the shares under any applicable law, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. I agree that the Company shall have unilateral authority to amend the ESPP and this Agreement without my consent to the extent necessary to comply with securities or other laws applicable to the issuance of shares. |
| SECTION 7:<br><br>**NO ADVICE REGARDING GRANT** | The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding my participation in the ESPP or my acquisition or sale of shares of Common Stock. I understand that I should consult with my own personal tax, legal and financial advisors regarding my participation in the ESPP before taking any action related to the ESPP. |
| SECTION 8:<br><br>**ELECTRONIC DELIVERY AND ACCEPTANCE** | The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the ESPP by electronic means. I hereby consent to receive such documents by electronic delivery and agree to participate in the ESPP through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. |
| SECTION 9:<br><br>**ACKNOWLEDGMENT AND SIGNATURE** | I acknowledge that I have received a copy of the ESPP and the ESPP Prospectus (which summarizes the major features of the ESPP). I have read the ESPP and the ESPP Prospectus and my signature below indicates that I hereby agree to be bound by the terms of the ESPP.<br><br>Signature:_____ Date:_____ |

Third Harmonic Bio, Inc.

August 22, 2022

Natalie Holles

Dear Natalie:

This letter agreement (the "Agreement") amends and restates the employment agreement entered into between you and Third Harmonic Bio, Inc. (the "Company"), dated July 2, 2021 (the "Prior Agreement").

1. **Position.** You will continue to be employed by the Company on a full-time basis as its Chief Executive Officer, reporting to the Company's Board of Directors (the "Board").

2. **Base Salary.** You will receive a base salary at the semi-monthly rate of $20,833, which is equivalent to $500,000 on an annualized basis (the "Base Salary"). All payments of Base Salary will be made in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. The Base Salary will be subject to adjustment, as determined by the Board in its discretion.

3. **Annual Bonus.** Following the end of each fiscal year, you will be eligible to receive an annual incentive bonus of up to 50% of your annualized Base Salary (the "Target Bonus"). The actual bonus awarded for a fiscal year will be based on your performance and the Company's performance that year against criteria to be established by the Board, such bonus and such criteria as determined by the Board in its sole discretion. You must remain employed by the Company as of the last day of a fiscal year in order to be eligible for and to earn a bonus for such year.

4. **Special Bonus**. The Company has paid to you a one-time bonus of $1,867,102 (the "Special Bonus"), which will be subject to a three-year vesting with six-months cliffs subject to your continued employment on the relevant vesting dates.

5. **Equity.** The Company acknowledges that it has previously issued equity awards to you. Nothing in this letter will amend or affect the terms of such award agreements, except as set forth in your Severance Agreement (as defined below).

6. **Benefits.** You may participate in the benefit programs offered by the Company to its employees from time to time, provided that you are eligible under (and subject to all provisions of) the plan documents that govern those programs. Benefits are subject to change at any time in the Company's sole discretion. You will also be entitled to paid vacation each year in accordance with the terms and conditions set forth in the Company's vacation policy as in effect from time to time, but for avoidance of doubt, you will accrue no less than three weeks paid vacation per year. You shall also be entitled to receive reimbursement for all reasonable business expenses incurred by you in performing your services to the Company (which shall include reasonable lodging costs and business-class airfare costs you incur as a result of you providing services to the Company in its Cambridge, Massachusetts office location) in accordance with the policies and procedures then in effect and established by the Company

7. **Severance Benefits.** You will be eligible to receive change in control and severance payments and benefits under the Severance and CIC Retention Agreement (the "Severance Agreement") between you and the Company, dated August 22, 2022.

8. **Representation Regarding Continuing Obligations.** Your employment is contingent upon your adhering to an Invention and Non-Disclosure Agreement (the "Restrictive Covenant Agreement. You hereby represent to the Company that you are not a party to any agreement of any type which may impact or limit your ability to become employed by or perform your job at the Company or which is in any way inconsistent with the terms of this offer letter or the Restrictive Covenant Agreement. You represent that you will not disclose to the Company or induce the Company to use any confidential or proprietary information or material belonging to any current or previous employer or any other party. Further, you hereby represent that (i) your employment with the Company and this offer letter does not and will not violate or conflict with any obligations you may have to or any agreements you may have with any former employer and (ii) you have provided the Company with all written agreements that describe any continuing post-employment obligations to any former employer.

9. **Proof of Legal Right to Work**. You agree to provide to the Company, within three (3) days of the Start Date, documentation proving your eligibility to work in the United States, as required by the Immigration Reform and Control Act of 1986. You may need a work visa in order to be eligible to work in the United States. If that is the case, your employment with the Company will be conditioned upon your obtaining a work visa in a timely manner as determined by the Company.

10. **Tax Matters.**

a. All forms of compensation referred to in this offer letter are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities and that you are solely responsible for individual tax liabilities arising from your compensation.

b. For purposes of Section 409A of the Code, each salary continuation payment under Section 6(b)(ii) is hereby designated as a separate payment. If the Company determines that you are a "specified employee" under Section 409A(a)(2)(B)(i) of the Code at the time of your Separation, then (i) the salary continuation payments under Section 6(b)(ii), to the extent that they are subject to Section 409A of the Code, will commence on the first business day following (A) expiration of the six-month period measured from your Separation, or (B) the date of your death, and (ii) the installments that otherwise would have been paid prior to such date will be paid in a lump sum when the salary continuation payments commence. Any salary continuation payments that are not subject to Section 409A of the Internal Revenue Code, including, without limitation, payments that are exempt from Section 409A of the Internal Revenue Code as a result of the separation pay plan exemption under Section 1.409A-1(b)(9) of the Internal Revenue Code (or any successor thereto), will continue to be paid as otherwise provided in this offer letter.

c. All in-kind benefits provided and expenses eligible for reimbursement hereunder shall be provided by the Company or incurred by you during your employment with the Company. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year. Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

11. **Interpretation, Amendment and Enforcement.** This offer letter constitutes the complete agreement between you and the Company, contains all the terms of your employment, and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company relating to the terms of your employment. The terms of this offer letter and the resolution of any disputes as to the meaning, effect, performance or validity of this offer letter or arising out of, related to, or in any way connected with, this offer letter, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by Massachusetts law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in the Commonwealth of Massachusetts in connection with any Dispute or any claim related to any Dispute.

12. **Other Terms.** This letter shall not be construed as an agreement, either express or implied, to employ you for any stated term, and shall in no way alter the Company's policy of employment at-will as defined by applicable law, which means that you have the right to terminate your employment relationship with the Company at any time for any reason and the Company has the right to terminate its employment relationship with you at any time for any reason, with or without cause or notice. Similarly, nothing in this letter shall be construed as an agreement, either express or implied, to pay you any compensation or grant you any benefit beyond the end of your employment with the Company other than as provided in this letter.

Very truly yours,

Third Harmonic Bio, Inc.

*/s/ Mark Iwicki*
Mark Iwicki
Chairman of the Board

ACCEPTED AND AGREED

*/s/ Natalie Holles*
Natalie Holles

August 24, 2022
Date

**Exhibit 10.10**

# CHANGE IN CONTROL AND SEVERANCE AGREEMENT

This Change in Control and Severance Agreement (the "**Agreement**") is entered into by and between [Name] (the "**Executive**") and Third Harmonic Bio, Inc., a Delaware corporation (the "**Company**"), effective as of the Effective Date.

1. **Qualifying Termination.** If the Executive is subject to a Qualifying Termination, then, subject to Sections 3, 7, and 8 below, Executive will be entitled to the following benefits:

(a) **Severance Benefits.** The Company shall pay the Executive [12 months][1] [9 months][2] of his/her monthly base salary (at the rate in effect immediately prior to the actions that resulted in the Qualifying Termination) [plus a pro-rated amount of his/her Target Bonus for the year in which the Qualifying Termination occurs] [3]. The Executive will receive his or her severance payment in equal installments over a [12 months][4] [9 months][5] period, in accordance with the Company's standard payroll procedures; provided, however, that the Executive will receive the first such installment payment on the first business day occurring after the sixtieth ($60_{th}$) day following the Separation (*provided that* the Release Conditions have been satisfied), which payment shall include a catch-up payment covering the amount that would have otherwise been paid during the period between Executive's Separation and the first payment date but for the application of this provision, and the balance of the installments will be payable in accordance with their original schedule. [Such payment of the pro-rata target bonus shall be paid in a cash lump sum when bonuses are paid to other executives to the Company, but in all cases not before the ($60_{th}$) day following the Separation or after March 15 of the calendar year following the Separation, *provided that*, the Release Conditions have been satisfied][6].

(b) **Continued Employee Benefits.** If Executive timely elects continued coverage under the Consolidated Omnibus Budget Reconciliation Act ("**COBRA**"), the Company shall pay the full amount of Executive's COBRA premiums on behalf of the Executive for the Executive's continued coverage under the Company's health, dental and vision plans, including coverage for the Executive's eligible dependents, for the same period that the Executive is paid severance benefits pursuant to Section 1(a) following the Executive's Separation or, if earlier, until Executive is eligible to be covered under another substantially equivalent medical insurance plan by a subsequent employer. Notwithstanding the foregoing, if the Company, in its sole discretion, determines that it cannot provide the foregoing subsidy of COBRA coverage without potentially violating or causing the Company to incur additional expense as a result of noncompliance with applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company instead shall provide to Executive a taxable monthly payment in an amount equal to the monthly COBRA premium that Executive would be required to pay to continue the group health coverage in effect on the date of the Separation (which amount shall be based on the premium for the first month of COBRA coverage), which payments shall be made regardless of whether Executive elects COBRA continuation coverage and shall commence on the later of (i) the first day of the month following the month in which Executive experiences a Separation and (ii) the effective date of the Company's determination of violation of applicable law, and shall end on the earlier of (x) the effective date on which Executive becomes covered by a health, dental or vision insurance plan of a subsequent employer, and (y) the last day of the period that the Executive is paid severance benefits pursuant to Section 1(a) after the Separation, *provided that*, any taxable payments under Section 1(b) will not be paid before the first business day occurring after the sixtieth ($60^{th}$) day following the Separation and, once they commence, will include any unpaid amounts accrued from the date of Executive's Separation (to the extent not otherwise satisfied with continuation coverage). Executive shall have no right to an additional gross-up payment to account for the fact that such COBRA premium amounts are paid on an after-tax basis.

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1 For CEO.
2 For other Senior Executives.
3 For CEO.
4 For CEO.
5 For other Senior Executives.
6 For CEO.

(c) **[Equity.** Each of Executive's then outstanding Equity Awards, excluding awards that would otherwise vest only upon or following satisfaction of performance criteria (including, for the avoidance of doubt, any awards subject to both performance-based and time-based vesting criteria), shall accelerate and become vested and exercisable as though Executive had provided an additional twelve (12) months of service to the Company. Subject to Section 3, the accelerated vesting described above shall be effective as of the Separation.][7]

2. **CIC Qualifying Termination.** If the Executive is subject to a CIC Qualifying Termination, then, subject to Sections 3, 7, and 8 below, Executive will be entitled to the following benefits:

(a) **Severance Payments.** The Company or its successor shall pay the Executive [18 months][8] [12 months][9] of his/her monthly base salary and [150%][10] [100%][11] of his/her annual target bonus, in each case, at the rate in effect immediately prior to the actions that resulted in the Separation, [plus a pro-rated amount of his/her Target Bonus for the year in which the CIC Qualifying Termination occurs and the one-time Bonus will accelerate and become fully vested.][12] Such payment shall be paid in a cash lump sum payment in accordance with the Company's standard payroll procedures, which payment will be made no later than the first regular payroll date occurring after the sixtieth ($60^{th}$) day following the Separation, *provided that* the Release Conditions have been satisfied. For the avoidance of doubt, in the event that a Change of Control occurs within three (3) months following a Qualifying Termination, then the payments under Section 1(a) shall cease as of the date of such Change of Control and Executive shall receive additional payments as necessary in order to provide the benefits described in this Section 2(a), which in the case of the severance under Section 2(a) shall be in a lump sum.

(b) **Equity.** Each of Executive's then outstanding Equity Awards, excluding awards that would otherwise vest upon satisfaction of performance criteria (including, for the avoidance of doubt, any awards subject to both performance-based and time-based vesting criteria), shall accelerate and become vested and exercisable as to 100% of the then-unvested shares subject to the Equity Award. Subject to Section 3, the accelerated vesting described above shall be effective as of the Separation. For the avoidance of doubt, in order to give effect to the acceleration contemplated by this Section 2(b), each of Executive's outstanding Equity Awards shall remain outstanding and eligible to vest (solely pursuant to the terms of this Section 2(b)) for a period of three (3) months following a Qualifying Termination. [For the avoidance of doubt, in the event that a Change of Control occurs within three (3) months following a Qualifying Termination, then, notwithstanding the acceleration provided under Section 1(c) of this Agreement, the Executive's Equity Awards shall accelerate in full pursuant to the provisions of this Section 2(b) and shall remain eligible to vest to the extent necessary to give effect to this sentence.][13]

(c) **COBRA; Pay in Lieu of Continued Employee Benefits.** The Company or its successor shall provide the Executive with continuation of COBRA benefits or a cash benefit, in both cases on the same terms as set forth in Section 1(b) above, for the same period that the Executive is paid severance benefits pursuant to Section 2(a) following the Executive's Separation or, if earlier, until Executive is eligible to be covered under another substantially equivalent medical insurance plan by a subsequent employer.

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7 For CEO.
8 For CEO.
9 For other Senior Executives.
10 For CEO.
11 For other Senior Executives.
12 For CEO.
13 For CEO.

3. **General Release.** Any other provision of this Agreement notwithstanding, the benefits under Section 1 and 2 shall not apply unless the Executive (i) has executed a general release of all known and unknown claims that he or she may then have against the Company or persons affiliated with the Company and such release has become effective and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims. The release must be in the form prescribed by the Company, without alterations (this document effecting the foregoing, the "**Release**"). The Company will deliver the form of Release to the Executive within thirty (30) days after the Executive's Separation, or such other time limit as is expressly provided in the Release documents; provided, however, that in all cases the Release must be executed and have become irrevocable within sixty (60) days following the date of the Executive's Separation.

4. **Accrued Compensation and Benefits.** Notwithstanding anything to the contrary in Section 1 and 2 above, in connection with any termination of employment (whether or not a Qualifying Termination or CIC Qualifying Termination), the Company shall pay Executive's earned but unpaid base salary and other vested but unpaid cash entitlements for the period through and including the termination of employment, including unreimbursed documented business expenses incurred by Executive through and including the date of termination (collectively "**Accrued Compensation and Expenses**"), as required by law and the applicable Company plan or policy. In addition, Executive shall be entitled to any other vested benefits earned by Executive for the period through and including the termination date of Executive's employment under any other employee benefit plans and arrangements maintained by the Company, in accordance with the terms of such plans and arrangements, except as modified herein.

5. **Definitions.**

(a) "**Cause**" shall mean Executive's: (i) material breach of the provisions of this agreement, Executive's offer letter or employment agreement with the Company, the Company's written policies or rules or any proprietary information and inventions assignment agreement with the Company; ( (ii) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State; (iii) gross negligence or willful misconduct in the performance of his or her duties; (iv) [material][14] continuing failure to perform assigned duties after receiving written notification of the material failure from the Company [and you were afforded a reasonable opportunity to cure or remedy any such failure][15] or (v) failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested Executive's cooperation; provided, however, that "Cause" shall not be deemed to have occurred pursuant to subsection (iii), (iv), or (v) hereof unless Executive has first received written notice from the Board specifying in reasonable detail the particulars of such grounds and that the Company intends to terminate Executive employment hereunder for such grounds and Executive has failed to cure such grounds within a period of thirty (30) days from the date of such notice.

(b) "**Code**" means the Internal Revenue Code of 1986, as amended.

(c) "**Change in Control**." For all purposes under this Agreement, a Change in Control shall mean a "Corporate Transaction," as such term is defined in the Plan, *provided that* the transaction (including any series of transactions) also qualifies as a change in control event under U.S. Treasury Regulation 1.409A-3(i)(5)(v) and (vii).

(d) "**CIC Qualifying Termination**" means a Separation (A) within twelve (12) months following a Change in Control or (B) within three (3) months preceding a Change in Control (but as to part (B) only if the Separation occurs after a Potential Change in Control) resulting, in either case (A) or (B), from (i) the Company or its successor terminating the Executive's employment for any reason other than Cause or (ii) the Executive voluntarily resigning his or her employment for Good Reason. A termination or resignation due to the Executive's death or disability shall not constitute a CIC Qualifying Termination. A "**Potential Change in Control**" means the date of execution of a legally binding and definitive agreement for a corporate transaction which, if consummated, would constitute the applicable Change in Control (which for the avoidance of doubt, would include a merger agreement, but not a term sheet for a merger agreement). In the case of a termination following a Potential Change in Control and before a Change in Control, solely for purposes of benefits under this Agreement, the date of Separation will be deemed the date the Change in Control is consummated to the extent permitted by Section 409A of the Code.

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14 For CEO.

15 For other Senior Executives.

"**Effective Date**" means the date on which the Registration Statement covering the initial public offering of the shares of common stock of the Company is declared effective by the U.S. Securities and Exchange Commission.

(e) "**Equity Awards**" means all options to purchase shares of Company common stock, as well as all other stock-based awards granted to the Executive, including, but not limited to, stock bonus awards, restricted stock, restricted stock units and stock appreciation rights. Notwithstanding any other provision of this Agreement to the contrary, any Equity Awards that were originally subject to performance-based vesting criteria for which such performance-based vesting criteria have since been satisfied such that the Equity Award remains subject to time-based vesting requirements only, shall be considered to be a time-based Equity Award for purposes of this Agreement and shall not be subject to any provisions that specifically apply only to performance-based Equity Awards.

(f) "**Good Reason**" means, without the Executive's prior written consent, (i) a reduction in Executive's Base Salary (unless such reduction is part of a broad-based salary reduction applicable to the Company's senior management) [or Target Bonus percentage][16]; (ii) a material diminution of Executive's authority, duties or responsibilities; (iii) a [forced permanent][17] relocation of Executive's primary working location with the Company by more than [35][18] [40][19] miles from his or her current working location; [(iv) Executive's removal as Chief Executive Officer of the Company (or if following a Change in Control, Executive is not appointed as, or is removed as, Chief Executive Officer of the combined company resulting from, or if applicable, the ultimate parent entity of the acquiring party in, such Change in Control); or (v) the Company's failure to have any successor assume the obligations under Executive's offer letter or employment agreement with the Company][20]. Notwithstanding the foregoing, Good Reason will not be deemed to have occurred unless (i) Executive gives the Company written notice of the condition within ninety (90) days after the condition comes into existence, (ii) the Company fails to remedy the condition within thirty (30) days after receiving Executive's written notice (the "Cure Period") and (iii) Executive resigns within thirty (30) days after the expiration of the Cure Period..

(g) "**Plan**" means the Company's 2022 Equity Incentive Plan, as may be amended from time to time.

(h) "**Release Conditions**" mean the following conditions: (i) Company has received the Executive's executed Release and (ii) any rescission period applicable to the Executive's executed Release has expired (without Executive having rescinded the executed Release).

(i) "**Qualifying Termination**" means a Separation that is not a CIC Qualifying Termination, but which results from the Company terminating the Executive's employment for any reason other than Cause. A termination or resignation due to the Executive's death or disability shall not constitute a Qualifying Termination.

(j) "**Separation**" means a "separation from service," as defined in the regulations under Section 409A of the Code.

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16 For CEO.
17 For CEO.
18 For CEO.
19 For other Senior Executives.
20 For CEO.

6. **Successors.**

(a) **Company's Successors.** The Company shall require any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets, by an agreement in substance and form satisfactory to the Executive, to assume this Agreement and to agree expressly to perform this Agreement in the same manner and to the same extent as the Company would be required to perform it in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets or which becomes bound by this Agreement by operation of law.

(b) **Executive's Successors.** This Agreement and all rights of the Executive hereunder shall inure to the benefit of, and be enforceable by, the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

7. **Golden Parachute Taxes.**

(a) **Best After-Tax Result.** In the event that any payment or benefit received or to be received by Executive pursuant to this Agreement or otherwise ("**Payments**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this subsection (a), be subject to the excise tax imposed by Section 4999 of the Code, any successor provisions, or any comparable federal, state, local or foreign excise tax ("**Excise Tax**"), then, subject to the provisions of Section 7, such Payments shall be either (A) provided in full pursuant to the terms of this Agreement or any other applicable agreement, or (B) provided as to such lesser extent which would result in no portion of such Payments being subject to the Excise Tax ("**Reduced Amount**"), whichever of the foregoing amounts, taking into account the applicable federal, state, local and foreign income, employment and other taxes and the Excise Tax (including, without limitation, any interest or penalties on such taxes), results in the receipt by Executive, on an after-tax basis, of the greatest amount of payments and benefits provided for hereunder or otherwise, notwithstanding that all or some portion of such Payments may be subject to the Excise Tax. Unless the Company and Executive otherwise agree in writing, any determination required under this Section shall be made by independent tax counsel designated by the Company and reasonably acceptable to Executive ("**Independent Tax Counsel**"), whose determination shall be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required under this Section, Independent Tax Counsel may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code; *provided that* Independent Tax Counsel shall assume that Executive pays all taxes at the highest marginal rate. The Company and Executive shall furnish to Independent Tax Counsel such information and documents as Independent Tax Counsel may reasonably request in order to make a determination under this Section. The Company shall bear all costs that Independent Tax Counsel may reasonably incur in connection with any calculations contemplated by this Section. In the event that Section 7(a)(ii)(B) above applies, then based on the information provided to Executive and the Company by Independent Tax Counsel, Executive may, in Executive's sole discretion and within thirty (30) days of the date on which Executive is provided with the information prepared by Independent Tax Counsel, determine which and how much of the Payments (including the accelerated vesting of equity compensation awards) to be otherwise received by Executive shall be eliminated or reduced (as long as after such determination the value (as calculated by Independent Tax Counsel in accordance with the provisions of Sections 280G and 4999 of the Code) of the amounts payable or distributable to Executive equals the Reduced Amount). If the Internal Revenue Service (the "**IRS**") determines that any Payment is subject to the Excise Tax, then Section 7(b) hereof shall apply, and the enforcement of Section 7(b) shall be the exclusive remedy to the Company.

(b) **Adjustments.** If, notwithstanding any reduction described in Section 7(a) hereof (or in the absence of any such reduction), the IRS determines that Executive is liable for the Excise Tax as a result of the receipt of one or more Payments, then Executive shall be obligated to surrender or pay back to the Company, within one-hundred twenty (120) days after a final IRS determination, an amount of such payments or benefits equal to the "**Repayment Amount**." The Repayment Amount with respect to such Payments shall be the smallest such amount, if any, as shall be required to be surrendered or paid to the

Company so that Executive's net proceeds with respect to such Payments (after taking into account the payment of the Excise Tax imposed on such Payments) shall be maximized. Notwithstanding the foregoing, the Repayment Amount with respect to such Payments shall be zero (0) if a Repayment Amount of more than zero (0) would not eliminate the Excise Tax imposed on such Payments or if a Repayment Amount of more than zero would not maximize the net amount received by Executive from the Payments. If the Excise Tax is not eliminated pursuant to this Section 7(b), Executive shall pay the Excise Tax.

**8. Miscellaneous Provisions.**

(a) **Section 409A.** To the extent (i) any payments to which Executive becomes entitled under this Agreement, or any agreement or plan referenced herein, in connection with Executive's termination of employment with the Company constitute deferred compensation subject to Section 409A of the Code and (ii) Executive is deemed at the time of such termination of employment to be a "specified" employee under Section 409A of the Code, then such payment or payments shall not be made or commence until the earlier of (i) the expiration of the six (6)-month period measured from the Executive's Separation; or (ii) the date of Executive's death following such Separation; *provided, however*, that such deferral shall only be effected to the extent required to avoid adverse tax treatment to Executive, including (without limitation) the additional twenty percent (20%) tax for which Executive would otherwise be liable under Section 409A(a)(1)(B) of the Code in the absence of such deferral. Upon the expiration of the applicable deferral period, any payments which would have otherwise been made during that period (whether in a single sum or in installments) in the absence of this paragraph shall be paid to Executive or Executive's beneficiary in one lump sum (without interest). Except as otherwise expressly provided herein, to the extent any expense reimbursement or the provision of any in-kind benefit under this Agreement (or otherwise referenced herein) is determined to be subject to (and not exempt from) Section 409A of the Code, the amount of any such expenses eligible for reimbursement, or the provision of any in-kind benefit, in one calendar year shall not affect the expenses eligible for reimbursement or in kind benefits to be provided in any other calendar year, in no event shall any expenses be reimbursed after the last day of the calendar year following the calendar year in which Executive incurred such expenses, and in no event shall any right to reimbursement or the provision of any in-kind benefit be subject to liquidation or exchange for another benefit. To the extent that any provision of this Agreement is ambiguous as to its exemption or compliance with Section 409A, the provision will be read in such a manner so that all payments hereunder are exempt from Section 409A to the maximum permissible extent, and for any payments where such construction is not tenable, that those payments comply with Section 409A to the maximum permissible extent. To the extent any payment under this Agreement may be classified as a "short-term deferral" within the meaning of Section 409A, such payment shall be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section 409A. Payments pursuant to this Agreement (or referenced in this Agreement) are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the regulations under Section 409A. To the extent any nonqualified deferred compensation subject to Section 409A of the Code payable to the Executive hereunder could be paid in one or more taxable years depending upon the Executive completing certain employment-related actions (such as resigning after a failure to cure a Good Reason event and/or returning the Release), then any such payments will commence or occur in the later taxable year to the extent required by Section 409A of the Code.

(b) **Other Arrangements.** This Agreement supersedes any and all cash severance arrangements and vesting acceleration arrangements under any agreement governing Equity Awards, severance and salary continuation arrangements, programs and plans which were previously offered by the Company to the Executive, including employment agreement or offer letter, and Executive hereby waives Executive's rights to such other benefits. In no event shall any individual receive cash severance benefits under both this Agreement and any other vesting acceleration, severance pay or salary continuation program, plan or other arrangement with the Company. For the avoidance of doubt, in no event shall Executive receive payment under both Section 1 and Section 2 with respect to Executive's Separation. In no event will Executive be entitled to equity acceleration or severance benefits under both this policy and any other acceleration or severance policies or programs sponsored by the Company. Notwithstanding the foregoing, the vesting acceleration benefits described herein may be superseded in award agreements entered into or amended following the date of this Agreement, provided that any such superseding award agreements expressly reference and overwrite the terms of this Agreement.

(c) **Dispute Resolution.** To ensure rapid and economical resolution of any and all disputes that might arise in connection with this Agreement, Executive and the Company agree that any and all disputes, claims, and causes of action, in law or equity, arising from or relating to this Agreement or its enforcement, performance, breach, or interpretation, will be resolved solely and exclusively by final, binding, and confidential arbitration, by a single arbitrator, in San Francisco County, and conducted by Judicial Arbitration & Mediation Services, Inc. ("**JAMS**") under its then-existing employment rules and procedures. Nothing in this section, however, is intended to prevent either party from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Each party to an arbitration or litigation hereunder shall be responsible for the payment of its own attorneys' fees.

(d) **Notice.** Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid or deposited with Federal Express Corporation, with shipping charges prepaid. In the case of the Executive, mailed notices shall be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(e) **Waiver.** No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Executive and by an authorized officer of the Company (other than the Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(f) **Withholding Taxes.** All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(g) **Severability.** The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(h) **No Retention Rights.** Nothing in this Agreement shall confer upon the Executive any right to continue in service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company or any subsidiary of the Company or of the Executive, which rights are hereby expressly reserved by each, to terminate his or her service at any time and for any reason, with or without Cause.

(i) **Choice of Law.** The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California (other than its choice-of-law provisions).

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

| EXECUTIVE | THIRD HARMONIC BIO, INC. |
| --- | --- |
| | By:<br>Title: |

**Exhibit 23.1**

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Registration Statement No. 333-267022 on Form S-1 of our report dated May 13, 2022 (September 8, 2022, as to the effects of the 1-for-2.259 stock split described in Note 14) relating to the financial statements of Third Harmonic Bio, Inc. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP

Morristown, NJ
September 8, 2022

**Exhibit 107**

**Calculation of Filing Fee Table**

Form S-1

Third Harmonic Bio, Inc.

Table 1 — Newly Registered Securities

| Security Type | Security Class Title | Fee Calculation Rule | Amount Registered(1) | Proposed Maximum Offering Price Per Share | Maximum Aggregate Offering Price(2) | Fee Rate | Amount of Registration Fee |
|---|---|---|---|---|---|---|---|
| Equity | Common Stock, par value $0.0001 per share | Rule 457(a) | 10,350,000 | $18.00 | $186,300,000 | $0.0000927 | $17,270 |
| Total Offering Amounts | | | | — | $186,300,000 | — | $17,270 |
| Total Fee Offsets | | | | — | — | — | $13,905 |
| Net Fee Due | | | | — | — | — | $3,365 |

(1) Includes up to an additional 1,350,000 shares to cover the underwriters' option to purchase securities to cover over-allotments, if any.
(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended, or the Securities Act.
(3) The Registrant previously paid $13,905 in connection with the previous filing of this registration statement.