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As filed with the Securities and Exchange Commission on September 17, 2021

Registration No. 333-

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

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

Pyxis Oncology, Inc.
(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**83-1160910**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

35 CambridgePark Drive
Cambridge, Massachusetts 02140
(617) 221-9059
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Lara Sullivan, M.D.
Chief Executive Officer
Pyxis Oncology, Inc.
35 CambridgePark Drive
Cambridge, Massachusetts 02140
(617) 221-9059
(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 statement number of the earlier effective registration statement for the same offering. ☐

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Proposed Maximum Aggregate Offering Price(1)(2)**	**Amount of Registration Fee**
Common Stock, par value $0.001 per share	$100,000,000	$10,910

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes the aggregate offering price of any additional common stock that the underwriters have the option to purchase, if any.

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

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

Subject to Completion
Preliminary Prospectus dated September 17, 2021

PROSPECTUS

Shares

Common Stock

This is Pyxis Oncology, Inc.'s initial public offering. We are selling shares of our common stock.

We expect the public offering price to be between $ and $ per share. Currently, no public market exists for the shares. After pricing of the offering, we expect that the shares will trade on the Nasdaq Global Market, or Nasdaq, under the symbol "PYXO."

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 public company reporting requirements for this prospectus and may elect to do so for future filings. See the section titled "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Investing in the common stock involves risks that are described in the "Risk Factors" section beginning on page 12 of this prospectus.

	Per share	Total
Public offering price	$	$
Underwriting discount(1)	$	$
Proceeds, before expenses, to us	$	$

(1) See the section entitled "Underwriting" for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional shares from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission, any state securities commission nor any other regulatory body has 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 to investors on or about , 2021.

BofA Securities **Jefferies** **Credit Suisse** **William Blair**

LifeSci Capital

The date of this prospectus is , 2021

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You should rely only on the information contained in this document or to which we have referred you. Neither we nor any of the underwriters has authorized anyone to provide you with information that is different. This document may only be used in jurisdictions where it is legal to sell these securities. The information in this document may only be accurate as of the date of this document or such other date set forth in this document, regardless of the time of delivery of this prospectus or of any sale of shares of our common stock, and the information in any free writing prospectus that we may provide you in connection with this offering is accurate only as of the date of that free writing prospectus. Our business, financial condition, results of operations and future growth prospects may have changed since those dates.

Through and including , 2021 (the 25th day after the date of this prospectus), all dealers effecting transactions in the Common Stock, 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.

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for our product candidates. This information is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, assumptions and limitations, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions and limitations, are subject to risks and uncertainties and are subject to change based on various factors, including those discussed under the section titled "Risk Factors" and elsewhere in this prospectus. You are cautioned not to give undue weight to any such information, projections and estimates. The content of any third-party sources, except to the extent specifically set forth in this prospectus, does not constitute a portion of this prospectus and is not incorporated by reference herein.

For investors outside the United States: Neither we, nor 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 in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before buying shares in this offering. Therefore, you should read this entire prospectus carefully, including the sections titled "Risk Factors," "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, before deciding whether to purchase our common stock. Unless the context requires otherwise, the words "we," "us," "our," and "the Company" refer to Pyxis Oncology, Inc.

Overview

We are a preclinical oncology company focused on developing an arsenal of next-generation therapeutics to target difficult-to-treat cancers and improve quality of life for patients. We develop our product candidates with the objective to directly kill tumor cells, and to address the underlying pathologies created by cancer that enable its uncontrollable proliferation and immune evasion. Since our launch in 2019, we have developed a broad portfolio of novel antibody drug conjugate, or ADC, product candidates, and monoclonal antibody, or mAb, preclinical discovery programs that we are developing as monotherapies and in combination with other therapies.

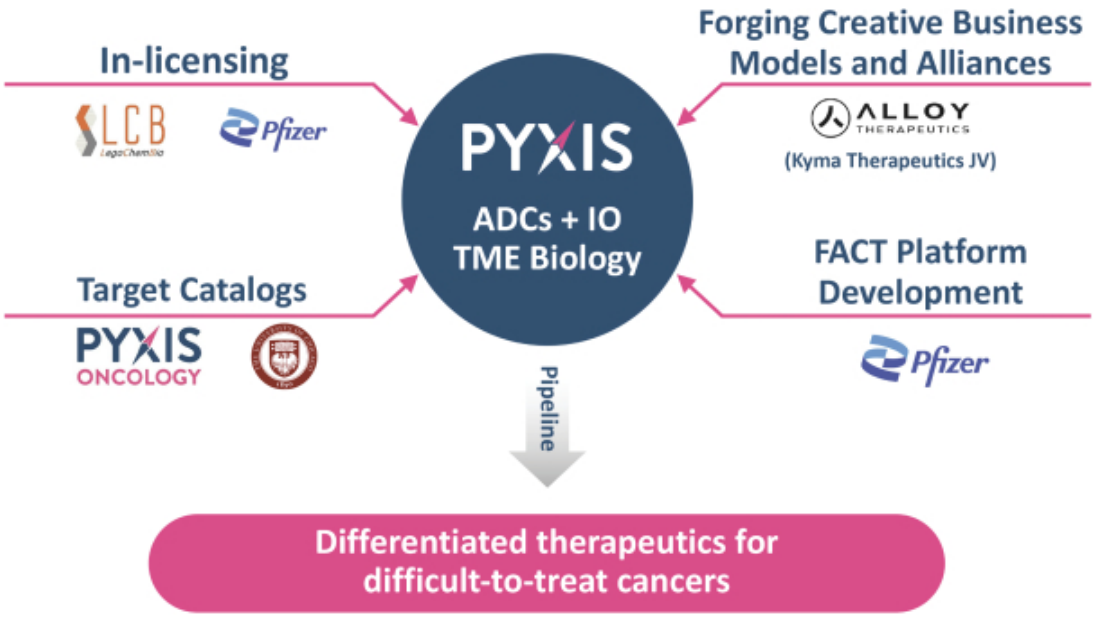
We take a holistic view of attacking the key drivers of tumor growth and progression within the tumor microenvironment, or TME, including targeting of tumor antigens and modulating the innate and adaptive immune response. The TME is an immunosuppressive environment consisting of cancer cells and stroma, which includes the blood vessels, immune cells, fibroblasts, signaling molecules, and the extracellular matrix that surrounds the tumor. The TME plays multiple roles in tumor formation, progression and metastasis as well as anti-tumor immune activity. We are developing our ADC product candidates and mAb preclinical discovery programs to precisely target key modulators of the adaptive and innate immune system within the TME for difficult-to-treat solid and hematologic tumors.

By leveraging our expert knowledge of the TME and established business development track record, we are developing cancer therapies and technologies through multiple avenues (see Figure 1) including:

- **Platform Development:** We are capitalizing on years of industry innovation and advancement in ADC platforms to develop and design our product candidates. For example, our product candidates PYX-201 and PYX-203 are built utilizing the Flexible Antibody Conjugation Technology, or FACT, platform technology in-licensed from Pfizer. FACT technology leverages over a decade of investment refining the technical components of ADCs to improve the clinical properties of ADCs. Using our expertise in site-specific antibody conjugation, we are developing next-generation ADCs with customized linker-payload combinations aimed at increasing stability and, consequently, a reduced off target side-effect profile potentially enhancing the therapeutic index, or TI.
- **Target Catalog**: We have a large proprietary target catalog that is based on our own discovery activities and the in-licensed intellectual property, or IP, that formed the founding of the company from the University of Chicago out of the work of Dr. Thomas Gajewski's laboratory. We believe that our target catalog will enable us to identify new ways to exploit multiple components of the TME for tumor targeting, either as new immuno-oncology, or IO, or ADC targets.
- **Forging Creative Business Models and Alliances:** We are continuously evaluating business development and alliance opportunities with a variety of third parties. We aim to be unconstrained by conventional ideas and practices to overcome the many and complex challenges of cancer treatment. We are creating development optionality by engaging in creative business models to further expand the pipeline such as our joint venture with Alloy Therapeutics, which we refer to as the Alloy Pyxis JV.

- **Product In-Licensing:** We selectively seek to in-license product candidates to expand our product pipeline. For example, our PYX-202 (DLK1 ADC) product candidate was in-licensed from LegoChem. Additionally, we also in-licensed PYX-201 (EDB ADC) and PYX-203 (CD123 ADC) from Pfizer.

Figure 1



Our Portfolio

Our ADCs utilize next-generation technologies that, based on observations from preclinical studies, may allow for increased stability and a reduced off target side-effect profile. We in-licensed two ADC programs in March 2021 from Pfizer and one ADC program from LegoChem in December 2020. Our two most advanced product candidates, PYX-201 and PYX-202, are in IND-enabling studies. In addition, PYX-203 is in preclinical development and we have additional preclinical mAb discovery programs derived from work at the laboratory of Dr. Thomas Gajewski. We retain full worldwide development and commercialization rights to all our product candidates, with the exception of PYX-202 in South Korea. We intend to develop each of our programs as a monotherapy and potentially also in combination with other therapies.

We are focusing our efforts on eliminating tumor cells through the selective antibody mediated delivery of cytotoxic payloads and by modulating key immune-associated pathways in the TME. We believe our pipeline has the potential to profoundly benefit cancer patients and provide effective treatment options for those who do not respond to currently available therapies.

ADCs are an established therapeutic modality, with eleven currently approved by the FDA, including six since 2019. Additionally, ADCs have received significant strategic interest from several pharmaceutical companies developing oncology therapeutics. ADCs are a combination of three key components—antibody, linker and cytotoxic payload. Many ADCs utilizing conjugation to existing lysine or cystine residues in the antibody, or conventional ADCs, struggled with one or more of these three key components, leading to heightened toxicity and limited efficacy. Despite the improvements that have been seen with currently marketed

ADCs, these ADCs still have limitations that impact dosing, and are associated with significant adverse events. We have designed our product candidates to overcome the limitations of ADCs that use conventional conjugation with the aim of providing patients with safer and more efficacious treatment options.

Our current pipeline is summarized below.

Figure 2

PYX-201 is an investigational, novel ADC consisting of an Immunoglobulin G1, or IgG1, anti-fibronectin Extradomain-B, or EDB, mAb conjugated to auristatin via a site-specific cathepsin B-cleavable linker. Fibronectin is a glycoprotein found in the extracellular matrix. Fibronectin EDB regulates blood vessel morphogenesis, which provides the tumor access to nutrition and oxygen, a means to remove waste, and a pathway for metastasizing cells. EDB is overexpressed in many malignancies and is minimally expressed in most normal adult tissues, making it a potentially attractive means to target tumors while sparing healthy cells. In preclinical models of patient derived xenograft, or PDX models, we observed tumor regression with single agent PYX-201. In addition, we observed that the treatment of preclinical syngeneic tumor models with PYX-201 resulted in T cell infiltration, which is a hallmark of immunogenic cell death, or ICD, and enhanced infiltration of T cells into the TME, enabling synergistic activity in combination with a checkpoint inhibitor. We anticipate submitting an IND by mid-2022.

PYX-202 is an investigational, novel ADC consisting of an IgG1 anti-Delta-like 1 homolog, or DLK1, mAb conjugated to monomethyl auristatin, or MMAE via a site-specific plasma- stable ß-glucuronide linker. DLK1 is a transmembrane protein normally expressed in embryonic tissues but highly restricted in healthy adult tissues. DLK1 becomes re-expressed in certain solid tumor malignancies. PYX-202 is designed to use the microtubule-disrupting MMAE payload, which is utilized in three currently marketed ADCs providing clinical support that the payload has anti-tumor effect potential. In preclinical small cell lung cancer, or SCLC, PDX models, as well as in a human cell line-based, or CDX, mouse model of cancer, we have observed significant anti-tumor activity as measured by durable tumor regression. We anticipate submitting an IND by mid-2022.

PYX-203 is an investigational ADC consisting of an IgG1 anti-CD123 mAb dimeric antibody conjugated to a novel cyclopropylpyrroloindoline, or CPI dimer payload via a site-specific plasma-stable, cleavable linker. CD123, or IL-3Ra, is a cell surface antigen highly expressed on leukemic stem cells and leukemic blasts in acute myeloid leukemia, or AML. PYX-203, utilizes a novel DNA-damaging toxin, CPI, and we have observed significant anti-tumor activity as measured by the reduction in the frequency of the leukemic cells in the blood and bone marrow in nine preclinical AML models. We anticipate submitting an IND by 2023.

In addition to the programs identified above, we are conducting research and development activities on various targets, leveraging our expertise in monoclonal antibodies and understanding of immuno-oncology. Our preclinical discovery programs are novel antibody programs intended to enhance the anti-tumor activity of natural killer, or NK cells, and T cells and to overcome immunosuppressive activity of tumor resident myeloid cells such as tumor associated macrophages, or TAMs, and myeloid derived suppressor cells, or MDSCs.

Our Team and History

We have assembled a world class management team with deep experience in oncology research and development and a demonstrated track record of executing business development transactions and advancing programs through various stages of development at or on behalf of leading pharmaceutical companies such as Pfizer, AstraZeneca, SpringWorks, Taris and MedImmune. Our executive team has a track record of success, building public biotech companies and developing innovative medicines. Our Chief Executive Officer, Lara Sullivan, M.D., was founder and President of SpringWorks Therapeutics, our Chief Scientific Officer, Ronald Herbst, Ph.D., was the originator of a majority of Viela Bio's founding portfolio, our Chief Medical Officer, Jay Feingold, M.D., Ph.D., was most recently a Senior Vice President, the Chief Medical Officer and Head of Oncology Clinical Development at ADC Therapeutics, and our Chief Financial Officer, Pamela Connealy, was most recently the Chief Financial Officer of Immunovant. Our management team is supported by our operating team and scientific advisory board, who offer industry leading expertise in drug discovery and development, as well as technical expertise in ADCs. Our leadership team has built a synergistic network of relationships across the life sciences industry, with leading institutions, academics and corporations. We intend to leverage our industry relationships and execution excellence to identify potential strategic partnerships, accelerate our pipeline and enhance our drug development capabilities.

We were founded by Longwood Fund and launched in July 2019, having acquired the rights to immuno-oncology IP that originated out of Dr. Thomas Gajewski's laboratory at the University of Chicago. We have also in-licensed ADC assets from LegoChem and Pfizer and have licensed the rights to Pfizer's ADC technology platform, which includes various payload classes, linkers, and site-specific conjugation techniques, which we call the FACT platform. We have raised $174 million to date from leading strategic and institutional investors, which include Longwood Fund, Leaps by Bayer, Arix Bioscience, RTW Investments, LP, Perceptive Advisors, RA Capital Management, Pfizer Ventures and other institutional investors.

Our Strategy

Our goal is to improve the lives of patients with difficult-to-treat cancers by building a superior portfolio of biological products, including ADCs and monoclonal antibody immunotherapies.

Elements of our strategy to achieve our short and long-term goals include:

- **Pursue a multi-modality approach to cancer therapy addressing various key components of the TME.** Our approach is to leverage our capabilities to develop investigational products that directly target tumor cells and stromal components of the TME with ADCs as well as enhance effector cell function and overcome key mechanisms of immune-suppression with immunotherapeutic mAbs to improve response rates and/or deliver durable responses for more patients.
- **Progress our most advanced product candidates, PYX-201 and PYX-202, into and through clinical development.** We believe that our preclinical data to date support the clinical potential of PYX-201 and PYX-202 as monotherapies and in combination with other cancer therapies, including immunotherapies and product candidates within our own portfolio. We expect to submit at least two INDs in 2022.
- **Efficiently progress our preclinical IO programs.** We plan to continue the preclinical development of our pipeline of immunotherapies. If approved, we believe these monoclonal antibody programs have the potential to overcome several of the mechanisms responsible for suppressing immune function and effector cell activity, thus enhancing the anti-tumor immune response in the TME. We also plan to

leverage the potential ability of certain ADCs to induce immunogenic cell death to support synergistic combinations with IO agents, including those derived through our own programs.

- **Continue to leverage the FACT platform and our Target Catalog to expand our pipeline of product candidates.** We plan to continue to mine our target catalog to identify new ways to exploit multiple components of the TME for tumor targeting. Our target catalog may help identify critical immunomodulatory pathways within the TME that can be addressed with monoclonal antibodies. We plan to use our target catalog and the FACT platform to develop differentiated ADCs with potentially superior clinical activity relative to the current standards of care including monoclonal antibodies. Additionally, we intend to use the FACT platform to develop ADCs for attractive targets beyond our target catalog.
- **Selectively forge alliances to enhance and expand our product pipeline to further leverage our intellectual property**. We believe that the potential for single agent anti-tumor activity of our current and future products could be enhanced by incorporating potential collaborator technologies. We intend to selectively form alliances with partners to gain access to complementary technologies and expertise to develop and commercialize product candidates with increased potential for anti-tumor activity and the potential for a strong safety profile. We seek to further leverage our intellectual property portfolio through the formation of these alliances.
- **Leverage our team's deep experience and proficiency in oncology research and development to discover and advance novel ADC and immuno-oncology treatments for patients suffering from difficult-to-treat cancers.** We believe our team, which brings deep scientific TME knowledge, functional biology expertise, ADC and IO modality experience, and biologics development capabilities position us to build a leading oncology company focused on developing product candidates for cancers with high unmet need. We intend to continue to augment the team's experience and proficiency through the addition of new members.

Risks Associated With Our Business

Our business is subject to numerous risks, as more fully described in "Risk Factors" immediately following this prospectus summary. You should read these risks before you invest in our common stock. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business include:

- We are a preclinical stage biopharmaceutical company with a limited operating history and have incurred significant losses since our inception. We expect to incur losses over at least the next several years and may never achieve or maintain profitability.
- Even if this offering is successful, we will require substantial additional capital to finance our operations. If we are unable to raise such capital when needed, or on acceptable terms, we may be forced to delay, reduce or eliminate one or more of our research and product development programs or future commercialization efforts.
- We are heavily dependent on the success of PYX-201, PYX-202, and PYX-203, all of which are in the early stages of development, and if PYX-201, PYX-202, and/or PYX-203 are not successful in clinical trials or do not receive regulatory approval or licensure or are not successfully commercialized, our business will be materially adversely harmed.
- We are a preclinical stage biotechnology company and all of our product candidates are currently in preclinical development. Our product candidates may fail in development or suffer delays that materially and adversely affect their commercial viability. If we or our existing or future collaborators are unable to initiate and complete clinical development of, obtain regulatory licensure for or commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

- Our preclinical studies and clinical trials may fail to demonstrate adequately the safety, purity and potency of any of our product candidates, which would prevent or delay development, regulatory licensure and commercialization.
- Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory licensure or commercialize these programs on a timely basis or at all.
- If the market opportunities for any product that we develop are smaller than we believe they are, our revenue may be adversely affected and our business may suffer.
- We face competition from entities that have developed or may develop product candidates for cancer, including 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 product candidates may be adversely affected.
- The regulatory licensure and approval processes of the FDA and other comparable regulatory authorities are lengthy, time-consuming and inherently unpredictable and, if we are ultimately unable to obtain marketing licensure or approval for our product candidates, our business will be substantially harmed.
- If we fail to attract and retain qualified senior management and key scientific personnel, our business may be materially and adversely affected.
- We face risks related to health epidemics and outbreaks, including the COVID-19 pandemic, which could significantly disrupt our preclinical studies and clinical trials, and therefore our receipt of necessary regulatory licensure or approvals could be delayed or prevented.
- If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting our product candidates or we could lose certain rights to grant sublicenses.
- We rely on third-parties to manufacture our product candidates. Any failure by a third-party manufacturer to produce acceptable raw materials or product candidates for us or to obtain authorization from the FDA or comparable foreign regulatory authorities may delay or impair our ability to initiate or complete our clinical trials, obtain regulatory licensure or approvals or commercialize approved products.
- If we are unable to obtain and maintain patent protection for our product candidates, or if the scope of the patent protection obtained is not sufficiently broad, or if our patents are insufficient to protect our product candidates for an adequate amount of time, or if we are unable to obtain adequate protection for our proprietary know-how we may not be able to compete effectively in our markets.
- Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. If we breach our University of Chicago, Pfizer, or LegoChem license agreements or any of the other agreements under which we acquired, or will acquire, intellectual property rights covering our product candidates, we could lose the ability to continue the development and commercialization of the related product.

Corporate Information

We were incorporated in the state of Delaware on June 11, 2018 and launched with our first employee and Series A funding in July 2019. Our principal executive offices are located at 35 CambridgePark Drive Cambridge, Massachusetts 02140, and our telephone number is (617) 221-9059. Our website address is www.pyxisoncology.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

We have proprietary rights to trademarks, trade names and service marks appearing in this prospectus that are important to our business. Solely for convenience, the trademarks, service marks, logos and trade names referred to in this prospectus are without the ® and ™ symbols, but such references are not intended to indicate that we will not assert our rights or the rights of the applicable licensors in these trademarks, service marks and trade names. All trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

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

The Jumpstart Our Business Startups Act, or the JOBS Act, was enacted in April 2012 with the intention of encouraging capital formation in the United States and reducing the regulatory burden on newly public companies that qualify as emerging growth companies. We are an "emerging growth company" within the meaning of the JOBS Act. We may take advantage of certain exemptions from various public reporting requirements, including the requirement that we provide more than two years of audited financial statements and related management's discussion and analysis of financial condition and results of operations, and that our internal control over financial reporting be audited by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. In addition, the JOBS Act provides that an "emerging growth company" can delay adopting new or revised accounting standards until those standards apply to private companies. We intend to take advantage of these exemptions until we are no longer an emerging growth company. We have elected to use the 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 (1) are no longer an emerging growth company and (2) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We will cease to be an emerging growth company upon the earliest of (1) the end of the fiscal year following the fifth anniversary of this offering; (2) the last day of the fiscal year during which our annual gross revenues are $1.07 billion or more; (3) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities; and (4) the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeded $700.0 million as of the end of the second quarter of that fiscal year.

We are also a "smaller reporting company," meaning that the market value of our shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700 million. 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 have reduced disclosure obligations regarding executive compensation, and, similar to emerging growth companies, if we are a smaller reporting company with less than $100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

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 the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies could make our common stock less attractive to investors.

THE OFFERING

Common stock offered by us	shares
Underwriters' option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to additional shares at the public offering price, less underwriting discounts and commissions.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise in full their option to purchase additional shares)
Use of proceeds	We estimate that the net proceeds from this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $ or approximately $ if the underwriters' option to purchase additional shares is exercised in full, based on an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to advance PYX-201, PYX-202 and PYX 203 through IND-enabling studies and initiation of Phase 1 trials, for the continued advancement of our IO discovery programs, for business development activities and other general corporate purposes. See section titled "Use of Proceeds" for additional information.
Proposed Nasdaq trading symbol	"PYXO"
Risk factors	See the section titled "Risk Factors" on page 12 and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.

The number of shares of common stock that will be outstanding after this offering is based on 13,849,687 shares of our common stock outstanding as of June 30, 2021, and excludes:

- 17,537,516 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2021 under our 2019 Equity Incentive Plan, or the 2019 Plan, at a weighted average exercise price of $0.78 per share;
- shares of our common stock issuable upon the exercise of stock options granted after June 30, 2021 under our 2019 Plan, at a weighted average exercise price of $ per share;
- 5,018,612 shares of common stock available for future issuance as of June 30, 2021 under our 2019 Plan; and
- and additional shares of common stock that will become available for issuance under our 2021 Equity Incentive Plan, or the 2021 Plan, and our Employee Stock Purchase Plan, or the ESPP, respectively, each of which will become effective immediately prior to the effectiveness of the registration statement of which this prospectus is a part, as well as any automatic increases in the number of shares of common stock reserved for future issuance under our 2021 Plan and our ESPP.

Unless otherwise indicated or the context otherwise requires, all information in this prospectus assumes:

- the 1 for split of our common stock effected on , 2021;
- conversion of all of our Series A convertible preferred stock and Series B convertible preferred stock into an aggregate of 127,537,173 shares of common stock upon the closing of this offering;
- no issuance of, or exercise of outstanding, options after ;
- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the effectiveness of our amended and restated bylaws, which will each occur immediately prior to the completion of this offering; and
- no exercise of the underwriters of their option to purchase up to an additional shares of our common stock.

Summary Financial Data

The following tables set forth a summary of our historical financial data as of, and for the periods ended on, the dates indicated. We have derived the following statement of operations data for the years ended December 31, 2019 and 2020 from our audited financial statements appearing elsewhere in this prospectus. The condensed statements of operations data for the six months ended June 30, 2020 and 2021 and the condensed balance sheet data as of June 30, 2021 have been derived from our unaudited condensed financial statements appearing elsewhere in this prospectus and have been prepared on a basis consistent with our audited financial statements. In the opinion of management, the unaudited condensed financial data reflects all adjustments, consisting only of normal, recurring adjustments, necessary for a fair presentation of the financial information in those statements. You should read the following summary financial data together with our financial statements and the related notes appearing elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future, and our interim results are not necessarily indicative of results that may be expected for any full year or any other interim period.

	Years Ended December 31,		Six Months Ended June 30, (Unaudited)	
(in thousands, except share and per share data)	**2019**	**2020**	**2020**	**2021**
Statement of Operations Data:				
Operating expenses:				
Research and development	$ 1,224	$ 9,048	$ 3,484	$ 35,979
General and administrative	1,655	3,846	1,639	5,691
Total operating expenses	2,879	12,894	5,123	41,670
Loss from operations	(2,879)	(12,894)	(5,123)	(41,670)
Other income (expense):				
Interest income	107	66	65	10
Service fee income from related party	—	—	—	181
Change in fair value of derivative liability	—	—	—	(3,261)
Total other income (expense)	107	66	65	(3,070)
Loss from equity method investment in joint venture	—	—	—	(231)
Net loss and comprehensive loss	$ (2,772)	$ (12,828)	$ (5,058)	$ (44,971)
Net loss per common share, basic and diluted(1)	$ (0.65)	$ (1.96)	$ (0.86)	$ (5.01)
Weighted average common shares outstanding, basic and diluted(1)	4,271,897	6,553,346	5,875,177	8,975,369
Pro forma net loss per common share, basic and diluted (unaudited)		$ (0.09)		$ (0.32)
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)		139,741,208		140,702,744

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

	As of June 30, 2021		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
		(Unaudited) (in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$142,473	$ 142,473	$
Working capital(3)	134,533	134,533	
Total assets	147,049	147,049	
Total liabilities	10,614	10,614	
Convertible preferred stock	194,023	—	
Total stockholders' (deficit) equity	(57,588)	136,435	

(1) The pro forma balance sheet data give effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of shares of our common stock upon the closing of this offering.

(2) The pro forma as adjusted balance sheet data give further effect to (i) our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (ii) the milestone payment of $9.6 million in the fourth quarter of 2021 to LegoChem.

The pro forma as adjusted information is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this prospectus, including our financial statements and related notes appearing at the end of this prospectus, before making an investment decision. The risks described below are not the only ones facing us. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition or results of operations. In such case, the trading price of our common stock could decline, and you may lose all or part of your investment. This prospectus also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to our Financial Position and Need for Additional Capital

We are a preclinical stage biopharmaceutical company with a limited operating history and have incurred significant losses since our inception. We expect to incur losses over at least the next several years and may never achieve or maintain profitability.

We are a preclinical stage biopharmaceutical company with a limited operating history. Our net losses were $2.8 million and $12.8 million for the years ended December 31, 2019 and 2020, respectively and $5.1 million and $45.0 million for the six months ended June 30, 2020 and 2021, respectively. As of June 30, 2021, we had an accumulated deficit of $60.7 million. To date, we have not generated any revenue from product sales and have financed our operations primarily through sales of our equity interests. We are still in the early stages of development of our product candidates and expect to initiate our first clinical trial in . As such, we expect that it will be several years, if ever, before we have a product candidate ready for regulatory licensure and commercialization. We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to achieve profitability. To become and remain profitable, we must succeed in developing, obtaining marketing licensure for and commercializing products that generate significant revenue. This will require us to be successful in a range of challenging activities, including, without limitation, procuring clinical- and commercial-scale manufacturing, successfully completing preclinical studies and clinical trials of our product candidates, establishing arrangements with third parties for the conduct of our clinical trials, obtaining marketing licensure for our product candidates, manufacturing, marketing and selling any products for which we may obtain marketing licensure, discovering or obtaining rights to additional product candidates, identifying collaborators to develop product candidates we identify or additional uses of existing product candidates and successfully completing development of product candidates for our collaboration partners.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. We anticipate that our expenses will increase substantially if and as we:

- manufacture product candidates, conduct IND enabling studies and submit INDs and initiate Phase 1 clinical trials for our ADC product candidates, PYX-201, PYX-202 and PYX-203;
- select antibody programs to take into development including manufacture product candidates, conduct IND enabling studies and submit INDs and initiate Phase 1 clinical trials;
- initiate, conduct and successfully complete later-stage clinical trials;
- scale up external manufacturing capabilities for later stage trials and to commercialize our products
- seek marketing licenses for any product candidates that successfully complete clinical trials;
- ultimately establish a sales, marketing and distribution infrastructure for which we may obtain marketing licensure;

- leverage the FACT platform to identify and then advance additional product candidates into preclinical and clinical development;
- expand, maintain and protect our intellectual property portfolio;
- hire additional clinical, regulatory, scientific, operational, financial and management information personnel; and
- operate as a public company after this offering.

Further, following the closing of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, insurance, investor relations and other expenses that we did not incur as a private company.

Our expenses could increase beyond our expectations if we are required by the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other comparable regulatory authorities to perform trials in addition to those that we currently expect to perform, or if we experience any delays in establishing appropriate manufacturing arrangements for completing our planned clinical trials or the clinical development of any of our product candidates.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses we will incur or when, if ever, we will be able to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts or continue operations. A decline in the value of our company, or in the value of our common stock, could also cause investors to lose all or part of their investment.

If one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing those approved product candidates. Even if we are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

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

The development of biopharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. Our operations have consumed substantial amounts of cash since inception, and we expect our expenses to increase in connection with our ongoing activities, particularly as we work to prepare for IND submissions and initiate Phase 1 clinical trials of our product candidates PYX-201, PYX-202 and PYX-203 and advance our other preclinical research and development programs. Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with sales, marketing, manufacturing and distribution activities. Our expenses could increase beyond expectations if we are required by the FDA, the EMA or other comparable regulatory authorities to perform clinical trials or preclinical studies in addition to those that we currently anticipate. Other unanticipated costs may also arise. Because the design and outcome of our planned and anticipated clinical trials are highly uncertain, we cannot reasonably estimate the actual amount of resources and funding that will be necessary to successfully complete the development and commercialization of any product candidate we develop. 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 order to continue our operations.

As of June 30, 2021, we had approximately $142.5 million in cash and cash equivalents. Based on our current operating plan, our current cash and cash equivalents, together with the anticipated proceeds from this offering, are expected to be sufficient to fund our ongoing operations at least through . Our estimate as to how long we expect to be able to continue to fund our operations is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned.

We intend to use the net proceeds of the offering for development and regulatory activities relating to our product candidates, discovery programs, working capital and other general corporate purposes. Advancing the development of our product candidates will require a significant amount of capital. The net proceeds from this offering, together with our existing cash and cash equivalents, will not be sufficient to fund any of our product candidates through regulatory licensure. Because the length of time and activities associated with successful research and development of any individual product candidate are highly uncertain, we are unable to estimate the actual funds we will require for development, marketing licensure and commercialization activities. The timing and amount of our operating expenditures will depend largely on:

- the manufacture of product candidates, completion of our IND enabling studies and initiation of Phase 1 clinical trials for PYX-201, PYX-202 and PYX-203;
- the timing and progress of our other preclinical and clinical development activities;
- the number and scope of other preclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we have entered or may in the future enter into in-licensing, collaborations and research and development agreements;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing licensure;
- our ability to maintain our current licenses and research and development programs and to establish new collaboration arrangements;
- the costs involved in prosecuting, maintaining and enforcing patent and other intellectual property rights;
- any delays or interruptions, including due to the COVID-19 pandemic, that we experience in our preclinical studies, future clinical trials and/or supply chain;
- the cost and timing of regulatory licenses; and
- our efforts to hire additional clinical, regulatory, scientific, operational, financial and management personnel.

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 preclinical studies or clinical trials, if any, limit strategic opportunities or undergo reductions in our workforce or other corporate restructuring activities. We also could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies or product candidates that we would otherwise pursue on our own. We do not expect to realize revenue from sales of products or royalties from licensed products in the foreseeable future, if at all, and not until our product candidates are clinically tested, licensed for commercialization and successfully marketed. To date, we have primarily financed our operations through the sale of equity securities. We will be required to seek additional funding in the future and our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control. Additional funds may not be available to us on acceptable terms or at all. For example, market volatility resulting from the COVID-19 pandemic could adversely impact our ability to access capital as and when needed. 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, including the investors purchasing stock in this offering.

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

We incorporated in 2018 and staffing and meaningful operations commenced in mid-2019 and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, conducting discovery and research activities, engaging third parties for initiating manufacturing of drug product and preparing for preclinical toxicology studies, filing patent applications, identifying and obtaining rights to potential product candidates and advancing the FACT platform. All our product candidates are still in preclinical development. We have not yet demonstrated our ability to successfully submit INDs, initiate or complete any clinical trials, obtain marketing licenses, manufacture a commercial scale product directly or through a third party or conduct sales, marketing and distribution activities necessary for successful product commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history or if we had already successfully completed some or all of these types of activities.

In addition, as a preclinical stage biopharmaceutical company, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown challenges. We will need to transition at some point from a company with a research and development focus to a company capable of supporting commercial activities and we may not be successful in making that transition.

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

Risks Related to the Discovery and Development of our Product Candidates

We are heavily dependent on the success of PYX-201, PYX-202, and PYX-203, all of which are in the early stages of development, and if PYX-201, PYX-202, and/or PYX-203 are not successful in clinical trials or do not receive regulatory approval or licensure or are not successfully commercialized, our business will be materially adversely harmed.

To date, we have invested a significant portion of our efforts and financial resources in the development of PYX-201, PYX-202, and PYX-203. Our future success is substantially dependent on our ability to successfully initiate and complete clinical development for, obtain regulatory licensure for, and successfully commercialize PYX-201, PYX-202, and PYX-203, which may never occur. We currently have no products that are approved or licensed for commercial sale and may never be able to develop a marketable product. We expect that a substantial portion of our efforts and expenditures over the next few years will be devoted to PYX-201, PYX-202, and PYX-203, all of which will require clinical development, management of clinical and manufacturing activities, regulatory licensure, establishing commercial scale manufacturing, and significant sales, marketing, and distribution efforts before we can generate any revenues from any commercial sales. We cannot be certain that we will be able to successfully complete any of these activities or that, even if PYX-201, PYX-202, and/or PYX-203 receive regulatory licensure, such products will be able to successfully compete against therapies and technologies offered by other companies.

The research, testing, manufacturing, labeling, licensure, sale, packaging, marketing, and distribution of biological products are subject to extensive regulation by the FDA and comparable regulatory authorities in other countries. We are not permitted to market PYX-201, PYX-202, and PYX-203 in the United States until we

receive licensure of a Biologics License Application, or BLA, from the FDA for such product candidates, as appropriate. Further, we are not permitted to market PYX-201, PYX-202, or PYX-203 in any foreign countries until we receive the requisite licensure or approvals from such countries. We have not submitted a BLA to the FDA or comparable applications to any other comparable regulatory authorities for PYX-201, PYX-202, or PYX-203. We will not be in a position to do so for several years, if ever. If we are unable to obtain the necessary regulatory licensure or approvals for PYX-201, PYX-202, and PYX-203 in a country, we will not be able to commercialize such product candidate in that country. As a result, our financial position will be materially adversely affected, and we may not be able to generate sufficient revenue to continue our business.

We are a preclinical stage biotechnology company and all of our product candidates are currently in preclinical development. Our product candidates may fail in development or suffer delays that materially and adversely affect their commercial viability. If we or our existing or future collaborators are unable to initiate and complete clinical development of, obtain regulatory licensure for or commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We have no products on the market and our product candidates are currently in preclinical development. In particular, none of our product candidates have ever been tested in a human subject. As a result, their risk of failure is high. Our ability to achieve and sustain profitability depends on obtaining regulatory licensure for and successfully commercializing our product candidates, either alone or with third parties. Before obtaining regulatory licensure for the commercial distribution of our product candidates, we or an existing or future collaborator must conduct extensive preclinical studies and clinical trials to demonstrate the safety, purity and potency in humans of our product candidates. In addition, the development of novel antibodies is complex and difficult. Although our discovery and preclinical programs may initially show promise in identifying potential product candidates, they may not translate into product candidates for clinical development for a number of reasons, including that the target selection methodology we use may not be successful due to our inability to generate an applicable antibody candidate.

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

- negative or inconclusive results from preclinical studies or clinical trials leading to a decision or requirement to conduct additional preclinical studies or clinical trials or abandon a program;
- product-related side effects experienced by participants in our clinical trials or by individuals using therapeutic biological products similar to our product candidates;
- delays in submitting INDs or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;
- conditions imposed by the FDA, EMA or other comparable authorities regarding the scope or design of our clinical trials;
- delays in enrolling patients in clinical trials;
- high drop-out rates of patients;
- inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our clinical trials;
- greater than anticipated clinical trial costs;
- poor effectiveness of our product candidates during clinical trials;
- unfavorable FDA or other comparable regulatory agency inspection and review of a clinical trial site;

- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or
- varying interpretations of data by the FDA, the EMA and other comparable foreign regulatory authorities.

If any of the foregoing circumstances occur, we could experience significant delays or an inability to successfully commercialize our product candidates, which could materially harm our business. Moreover, if we do not receive regulatory approvals, we may not be able to continue our operations.

We have no experience as a company in completing IND-enabling preclinical studies or commencing and conducting clinical trials.

We have no experience as a company in completing IND-enabling preclinical studies or commencing and conducting clinical trials. In part because of this lack of experience, we cannot be certain that our preclinical studies will be completed on time or if our planned clinical trials will begin or be completed on time, if at all. Large-scale clinical trials would require significant additional financial and management resources and reliance on third-party clinical investigators and consultants. Relying on third-party clinical investigators, contract research organizations, or CROs, and consultants may cause us to encounter delays that are outside of our control. In addition, relying on third parties in the conduct of our preclinical studies or clinical trials exposes us to a risk that they may not adequately comply with good laboratory practice, or GLP, or good clinical practice, or GCP, as required for any studies or trials we plan to submit to a regulatory authority. We may be unable to identify and contract with sufficient investigators, CROs and consultants on terms that are acceptable to us on a timely basis or at all.

We may not be able to submit INDs to commence additional clinical trials on the timelines we expect and, even if we are able to, the FDA may not permit us to proceed.

We plan to submit an IND for PYX-201 by mid-2022, for PYX-202 by mid-2022, and for PYX-203 by 2023, but we may not be able to submit these planned INDs on the timelines we expect. For example, we may experience manufacturing delays or other delays with IND-enabling studies. Moreover, we cannot be sure that submission of an IND will result in the FDA allowing us to commence clinical trials or that, once begun, issues will not arise that lead to the suspension or termination of our clinical trials. Additionally, even if the applicable regulatory authorities agree with the design and implementation of the clinical trials set forth in our INDs, we cannot guarantee that those regulatory authorities will not change their requirements in the future, or that circumstances will not arise under which FDA or other regulatory authorities may place our clinical trials on partial or full clinical hold. These considerations apply to the INDs described above and also to new clinical trials we may submit as amendments to existing INDs or as part of new INDs in the future. Any failure to submit INDs on the timelines we expect or to obtain authorization to proceed with our trials may prevent us from completing our clinical trials or commercializing our products on a timely basis, if at all.

Our preclinical studies and clinical trials may fail to demonstrate adequately the safety, purity and potency of any of our product candidates, which would prevent or delay development, regulatory licensure and commercialization.

Before obtaining regulatory licensure for the commercial sale of any of our product candidates, including PYX-201, PYX-202 and PYX-203, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that our product candidates are safe, pure, and potent, as required under a BLA. Preclinical and clinical testing is expensive and can take many years to complete and the outcome of these activities is inherently uncertain. Failure can occur at any time during the preclinical study and clinical trial processes and, because our product candidates are in an early stage of development and have never been tested in

humans, there is a high risk of failure. In addition, any failures or adverse outcomes in preclinical or clinical testing seen by other developers of similar product candidates could materially impact the success of our programs. We may never succeed in developing marketable products.

It is also possible that the results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Although product candidates may demonstrate promising results in preclinical studies and early clinical trials, they may not prove to be effective in subsequent clinical trials. For example, testing on animals occurs under different conditions than testing in humans and, therefore, the results of animal studies may not accurately predict human experience. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through preclinical studies and clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety, purity, and potency profile despite having progressed successfully through preclinical studies and/or initial clinical trials. Likewise, early, smaller-scale clinical trials may not be predictive of eventual safety, purity and potency in large-scale pivotal clinical trials. Many companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of potency, insufficient durability of potency or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence preclinical studies and clinical trials are never approved or licensed for commercialization.

Additionally, we expect that the first clinical trials for our product candidates may be open-label studies, where both the patient and investigator know whether the patient is receiving the investigational product candidate or either an existing licensed biological product. Most typically, open-label clinical trials test only the investigational product candidate and sometimes do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. In addition, open-label clinical trials may be subject to an “investigator bias” where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. FDA may also not consider open-label clinical trials to be adequate and well controlled trials sufficient to support BLA licensure.

Any preclinical studies or clinical trials that we may conduct may not demonstrate the safety, purity, and potency necessary to obtain regulatory licensure to market our product candidates. If the results of our ongoing or future preclinical studies and clinical trials are inconclusive with respect to the safety, purity, and potency of our product candidates, if we do not meet the clinical endpoints with statistical and clinically meaningful significance or if there are safety concerns associated with our product candidates, we may be prevented or delayed in obtaining marketing licensure for those product candidates. In some instances, there can be significant variability in safety, purity, and potency results between different preclinical studies and 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 clinical trial protocols and the rate of dropout among clinical trial participants. While we have not yet initiated clinical trials for any of our product candidates, it is likely that there may be side effects associated with their use. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. If that were to occur, or if other developers of similar products were to find an unacceptable severity or prevalence of side effects with their candidates, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny licensure of our product candidates for any or all targeted indications. Product-related side effects could also affect patient recruitment or the ability of enrolled patients to complete an ongoing trial or result in potential product liability claims. Any of these occurrences may significantly harm our business, financial condition and prospects.

Further, our product candidates could cause undesirable side effects in clinical trials related to on-target toxicity. If on-target toxicity is observed or if our product candidates have characteristics that are unexpected, we may need to abandon their development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-

benefit perspective. Many compounds that initially showed promise in early stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound.

Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory licensure or commercialize these programs on a timely basis or at all.

In order to obtain FDA, European Commission (based on the opinion of the EMA's Committee for Human Medicinal Products, or CHMP) or other comparable licensure to market a new biological product we must demonstrate proof of safety, purity and potency or efficacy in humans. To meet these requirements, we will have to conduct adequate and well-controlled clinical trials. Before we can commence clinical trials for a product candidate, we must complete extensive preclinical studies that support our planned INDs or similar applications in foreign countries. Currently, all of our programs are in preclinical development. We cannot be certain of the timely completion or outcome of our preclinical studies and cannot predict if the FDA or other comparable foreign authorities and independent ethics committees will accept our proposed clinical programs or if the outcome of our preclinical studies will ultimately support the further development of our programs. As a result, we cannot be sure that we will be able to submit INDs or similar applications for our preclinical programs on the timelines we expect, if at all, and we cannot be sure that submission of INDs or similar applications will result in the FDA or other regulatory authorities or independent ethics committees allowing clinical trials to begin.

Conducting preclinical studies is a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. Any delays in preclinical studies conducted by us or potential future partners may cause us to incur additional operating expenses. The commencement and rate of completion of preclinical studies for a product candidate may be delayed by many factors, including, for example:

- inability to generate sufficient preclinical or other in vivo or in vitro data to support the initiation of clinical trials;
- the COVID-19 pandemic, which may result in delays; and
- delays in reaching a consensus with regulatory agencies on study design.

Moreover, because standards for preclinical assessment are evolving and may change rapidly, even if we reach an agreement with the FDA on a pre-IND proposal, the FDA may not accept the IND submission as presented. Even if clinical trials do begin for our preclinical programs, our clinical trials or development efforts may not be successful.

Clinical testing and product development is a lengthy and expensive process with an uncertain outcome. We may incur unexpected costs or experience delays in completing, or ultimately be unable to complete, the clinical testing and the development and commercialization of our product candidates.

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to the timing and outcome. A failure of one or more clinical trials can occur at any stage of the process. We may experience numerous unforeseen events during or as a result of clinical trials, which could delay or prevent our ability to receive marketing licensure or commercialize our product candidates, including:

- delays in reaching, or the failure to reach, a consensus with regulators on clinical trial design or the inability to produce acceptable preclinical results to enable entry into human clinical trials;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate, including as a result of delays in the testing, validation, manufacturing and delivery of product candidates to the clinical sites by us or by third parties with whom we have contracted to perform certain of those functions;
- delays in reaching, or the failure to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;

- the failure of regulators or institutional review boards to authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- difficulty in designing clinical trials and in selecting endpoints for diseases that have not been well studied and for which the natural history and course of the disease is poorly understood;
- the selection of certain clinical endpoints that may require prolonged periods of clinical observation or analysis of the resulting data;
- we may receive feedback from regulatory authorities that requires us to modify the design of our clinical trials;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, participants may drop out of these clinical trials at a higher rate than we anticipate or fail to return for post-treatment follow-up or the failure to recruit suitable patients to participate in our clinical trials;
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or institutional review boards to suspend or terminate our clinical trials;
- we may have to suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- the third parties with whom we contract may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- the requirement from regulators or institutional review boards that we or our investigators suspend or terminate clinical trials for various reasons, including noncompliance with regulatory requirements or unacceptable safety risks;
- clinical trials of our product candidates may produce negative or inconclusive results and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product candidate development and discovery programs;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- imposition of a clinical hold by regulatory authorities as a result of a serious adverse event, concerns with a class of product candidates or after an inspection of our clinical trial operations, trial sites or manufacturing facilities;
- occurrence of serious adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- regulators may revise the requirements for approving our product candidates, or such requirements may not be as we anticipate;
- delays in developing and validating any companion diagnostic to be used in the trial, to the extent we are required to do so; and
- disruptions caused by the evolving effects of the COVID-19 pandemic may increase the likelihood that we encounter these types of difficulties or delays in initiating, enrolling, conducting or completing our planned clinical trials.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing licenses for our product candidates;
- not obtain marketing licensure at all;

- obtain licensure for indications or patient populations that are not as broad as intended or desired;
- obtain licensure with labeling that includes significant use or distribution restrictions or safety warnings;
- be required to perform additional clinical trials to support marketing licensure;
- have regulatory authorities withdraw or suspend their license, or impose restrictions on distribution of a product candidate in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be subject to additional postmarketing testing requirements or changes in the way the product is administered;
- the FDA or comparable foreign regulatory authorities may fail to approve any companion diagnostics that may be required in connection with approval of our therapeutic product candidates; or
- have our product removed from the market after obtaining marketing licensure.

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

Further, cancer therapies sometimes are characterized as first-line, second-line or third-line. The FDA often approves or licenses new oncology therapies initially only for third-line or later use, meaning for use after two or more other treatments have failed. When cancer is detected early enough, first-line therapy, usually hormone therapy, surgery, radiation therapy, immunotherapy or a combination of these, is sometimes adequate to cure the cancer or prolong life without a cure. Second-line and third-line therapies are administered to patients when prior therapy is not effective. Our clinical trials will be with patients who have received one or more prior treatments and we expect that we would initially seek regulatory licensure for use of these product candidates as second-line or third-line therapy. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek licensure potentially as a first-line therapy, but any product candidates we develop, even if approved for second-line or third-line therapy, may not be approved for first-line therapy and, prior to seeking and/or receiving any licensures for first-line therapy, we may have to conduct additional clinical trials.

Any failures or setbacks involving the FACT platform, including adverse events, could have a detrimental impact on our research pipeline and future success.

We use the FACT platform in two of our three ADC product candidates for cancer therapies. Any failures or setbacks involving the FACT platform, including adverse events, could have a detrimental impact on our research pipeline and future success. For example, we may uncover a previously unknown risk associated with the FACT platform or other issues that may be more problematic than we currently believe, which may prolong the period of observation required for obtaining, necessitate additional clinical testing or result in the failure to obtain, regulatory licensure. If the FACT platform is not safe in certain product candidates, we would be required to abandon or redesign certain product candidates, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be successful in our efforts to use and expand the FACT platform to continue to build a pipeline of product candidates and develop marketable products.

We are using the FACT platform to develop two of our product candidates PYX-201 and PYX-203, as well as continuing to build our pipeline of product candidates. Our business depends not only on our ability to successfully develop, obtain regulatory licensure for, and commercialize the product candidates we currently

have in preclinical development, but to continue to generate new product candidates through our platform. Even if we are successful in continuing to build our pipeline and further progress the development of our current product candidates, any additional product candidates may not be suitable for clinical development, including as a result of harmful side effects, manufacturing issues, limited potency or other characteristics that indicate that they are unlikely to be products that will succeed in clinical development, receive marketing licensure or achieve market acceptance. If we cannot validate our technology platform by successfully commercializing product candidates, we may not be able to obtain product, licensing or collaboration revenue in future periods, which would adversely affect our business, financial condition, results of operations and prospects.

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

As a result of our limited financial and managerial resources, we must make strategic decisions as to which targets and product candidates to pursue and may forego or delay pursuit of opportunities with other targets or product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Failure to properly assess potential product candidates could result in our focus on product candidates with low market potential, which would harm our business, financial condition, results of operations and prospects. Our spending on current and future research, product candidates and discovery programs for specific targets or indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

If the market opportunities for any product candidate that we develop are smaller than we believe they are, our revenue may be adversely affected and our business may suffer.

The potentially addressable patient population for our current programs or future product candidates may be limited and the number of patients who have the cancers we are targeting may turn out to be lower than expected. Potentially addressable patient populations for our product candidates are only estimates. These estimates could prove to be incorrect, and the estimated number of potential patients in the United States and elsewhere could be lower than expected. It may also be that such patients may not be otherwise amenable to treatment with our product candidates, or patients could become increasingly difficult to identify and access, any of which could materially adversely affect our business, financial condition, results of operations and growth prospects.

Our estimated addressable markets and market opportunities for our product candidates are based on a variety of inputs, including data published by third parties, our own market insights and internal market intelligence, and internally generated data and assumptions. We have not independently verified any third-party information and cannot be assured of its accuracy or completeness. Market opportunity estimates, whether obtained or derived from third-party sources or developed internally, are subject to significant uncertainty and are based on assumptions and estimates that may prove not to be accurate. Although we believe our market opportunity estimates are reasonable, such information is inherently imprecise. In addition, our assumptions and estimates of market opportunities are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including but not limited to those described in this prospectus. If this third-party or internally generated data prove to be inaccurate or if we make errors in our assumptions based on that data, our actual market may be more limited than we estimate it to be. In addition, these inaccuracies or errors may cause us to misallocate capital and other critical business resources, which could harm our business.

The market may not be receptive to our product candidates because they are based on our novel therapeutic modality, and we may not generate any future revenue from the sale or licensing of product candidates.

Even if regulatory licensure 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 the product is otherwise accepted in the market. Some product candidates that we are developing are based on the FACT platform, which is a new technology and therapeutic approach. Our future success depends on the successful development of this novel therapeutic approach. Additionally, the regulatory licensure process for novel product candidates such as ours can be more expensive and take longer than for other, better-known or extensively-studied product candidates. No regulatory authority has granted licensure for any therapeutic using the FACT platform. As a result of these factors, it is more difficult for us to predict the time and cost of product candidate development, and we cannot predict whether the FACT platform will result in the development and marketing licensure of any products. Any development problems we experience in the future related to any of our programs may cause significant delays or unanticipated costs or may prevent the development of a commercially viable product. Advancing our products creates significant challenges for us, including:

- educating medical personnel regarding the potential potency and safety benefits, as well as the challenges, of incorporating our product candidates, if approved, into treatment regimens; and
- establishing the sales and marketing capabilities to gain market acceptance, if approved.

Any of these factors may prevent us from commercializing any of our product candidates we may develop on a timely or profitable basis, if at all.

Market participants with significant influence over acceptance of new treatments, such as physicians and third-party payors, may not adopt a product or treatment based on the FACT platform and technologies, and we may not be able to convince the medical community and third-party payors to accept and use, or to provide favorable reimbursement for, any product candidates developed by us or our existing or future collaborators. Market acceptance of our product candidates will depend on, among other factors:

- the timing of our receipt of any marketing and commercialization licensures;
- the terms of any licensures and the countries in which licensures are obtained;
- the safety, purity, and potency of our product candidates;
- the prevalence and severity of any adverse side effects associated with our product candidates;
- limitations or warnings contained in any labeling approved by the FDA, or other comparable foreign regulatory authorities;
- relative convenience and ease of administration of our product candidates;
- the willingness of patients to accept any new methods of administration;
- the success of our physician education programs;
- the availability of adequate government and third-party payor reimbursement
- the pricing of our products, particularly as compared to alternative treatments; and
- availability of alternative effective treatments for the disease indications our product candidates are intended to treat and the relative risks, benefits and costs of those treatments.

If any product candidate we commercialize fails to achieve market acceptance, it could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We have not tested any of our product candidates in clinical trials. The results of preclinical studies and early-stage clinical trials may not be predictive of future results in later studies or trials. Initial success in clinical trials may not be indicative of results obtained when these trials are completed or in later-stage clinical trials.

The results of preclinical studies may not be predictive of the results of clinical trials, and the results of any early-stage clinical trials we commence in the future may not be predictive of the results of the later-stage clinical trials. In addition, initial success in clinical trials may not be indicative of results obtained when such trials are completed on in later stage clinical trials. In particular, the small number of patients in our planned early clinical trials may make the results of these trials less predictive of the outcome of later clinical trials. For example, even if successful, the results of our Phase 1 clinical trials of our product candidates PYX-201, PYX-202, PYX-203 and other product candidates may not be predictive of the results of further clinical trials of these product candidates or any of our other product candidates. Moreover, preclinical and clinical data often are susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless have failed to obtain marketing licensure of their products. Our future clinical trials may not ultimately be successful or support further clinical development of any of our product candidates. There is a high failure rate for product candidates proceeding through clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving encouraging results in earlier studies. Any such setbacks in our clinical development could materially harm our business, results of operations, financial condition and prospects.

Additionally, from time to time, we may publish interim, top-line or preliminary data from our planned clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously announced or published. As a result, interim, top-line and preliminary data should be viewed with caution until the final data are available. Adverse differences between preliminary, top-line or interim data and final data could significantly harm our reputation and business prospects.

If we experience delays or difficulties in the enrollment of patients in our clinical trials, our timelines for submitting applications for and receiving necessary marketing authorizations, if any, could be delayed or prevented.

We may not be able to initiate clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials, as required by the FDA or similar regulatory authorities outside of the United States. While we believe that we will be able to enroll a sufficient number of patients into each of these clinical trials, we cannot predict with certainty how difficult it will be to enroll patients for trials in these rare indications generally and during the COVID-19 pandemic, specifically. Our ability to identify and enroll eligible patients for clinical trials may turn out to be limited or we may be slower in enrolling these trials than we anticipate. In addition, some of our competitors have ongoing clinical trials for product candidates that treat the same indications as our product candidates and, as a result, patients who would otherwise be eligible for our clinical trials may instead elect to enroll in clinical trials of our competitors' product candidates. Patient enrollment in clinical trials is also affected by other factors including:

- the severity of the disease under investigation;
- the size and nature of the patient population;
- the eligibility criteria for the trial in question;
- competing clinical trials or approved therapies which present an attractive alternative to patients and their physicians;

- perceived risks and benefits of the product candidate under study, including as a result of adverse effects observed in similar or competing therapies;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the burden on patients due to the scope and invasiveness of required procedures under clinical trial protocols, some of which may be inconvenient and/or uncomfortable;
- the ability to monitor patients adequately during and after treatment;
- the proximity and availability of clinical trial sites for prospective patients;
- the impact of the current COVID-19 pandemic, which may affect the conduct of a clinical trial, including by slowing potential enrollment or reducing the number of eligible patients for clinical trials.
- the risk that enrolled subjects will drop out or die before completion of the trial;
- patients failing to complete a clinical trial or returning for post-treatment follow-up; and
- our ability to manufacture the requisite materials for a patient and clinical trial.

Our inability to enroll a sufficient number of patients for our planned clinical trials, or our inability to do so on a timely basis, would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our planned clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

Our product candidates may cause undesirable and unforeseen side effects or have other properties impacting safety that could halt their clinical development, delay or prevent their regulatory licensure, limit their commercial potential or result in significant negative consequences.

Undesirable side effects caused by our product candidates could cause regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory licensure or approval by the FDA or other regulatory authorities. While we have not yet initiated clinical trials for any of our product candidates, it is likely that there may be side effects associated with their use. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny licensure or approval of our product candidates for any or all targeted indications. Such side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may 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 our product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate.

In the event that any of our product candidates receive regulatory licensure or approval and we or others identify undesirable side effects caused by one of our products, any of the following adverse events could occur, which could result in the loss of significant revenue to us and materially and adversely affect our results of operations and business:

- regulatory authorities may withdraw their licensure or 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 “black box” 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.

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

From time to time, we estimate the timing of the anticipated accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of preclinical studies and clinical trials and the submission of regulatory filings and may be associated with payments from collaborators. 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 may 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, our revenue may be lower than expected, the commercialization of our products may be delayed or never achieved and, as a result, our stock price may decline.

We face competition from entities that have developed or may develop product candidates for cancer, including 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 product candidates may be adversely affected.

The development and commercialization of therapeutic biological products is highly competitive. We compete with a variety of multinational biopharmaceutical companies and specialized biotechnology companies, as well as technology being developed at universities and other research institutions. Our competitors have developed, are developing or will develop product candidates and processes competitive with our product candidates. Competitive therapeutic treatments include those that have already been approved or licensed and accepted by the medical community and any new treatments that enter the market. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop product candidates. The biotechnology and pharmaceutical industries, including the oncology subsector, are characterized by rapidly evolving technologies, intense competition, and a strong defense of intellectual property and proprietary technologies. Any product candidates that we successfully commercialize may not be competitive with currently marketed therapies and any new therapies commercialized in the future.

We are aware of several companies that are developing cancer immunotherapies and ADCs. Many of these companies are well-capitalized and, in contrast to us, have significant clinical experience, and may include our existing or future collaborators. In addition, these companies compete with us in recruiting scientific and managerial talent.

Our success will partially depend on our ability to develop and protect therapeutics that are safer and more pure and potent than competing products. Our commercial opportunity and success will be reduced or eliminated if competing products that are safer, more effective, or less expensive than the therapeutics we develop are commercialized.

If our product candidates are licensed, they will compete with a range of therapeutic treatments that are either in development or currently marketed. Indeed, many companies are active across various stages of development in the oncology subsector and are marketing and developing products that employ similar ADC and immunotherapy approaches. As of April 2021, there were approximately 275 ADCs in clinical or preclinical development worldwide, of which the vast majority are being developed for the treatment of various cancer indications. Multiple companies are also involved in the marketing of approved ADC therapeutics which include, but are not limited to, ADC Therapeutics SA, Astellas Pharma, Inc., AstraZeneca plc, Daiichi Sankyo Company, Ltd., Genentech, Inc., Gilead Sciences, Inc, GlaxoSmithKline, plc, Pfizer, Inc., Rakuten Medical, Inc., and Seagen, Inc.

Our preclinical ADC and immunotherapy candidates may face substantial competition from alternative therapeutic modalities, such as CAR-T therapies, bispecific antibodies, and small molecules that are being developed for the same cancer types that we are targeting with our pipeline candidates. These approaches could prove to be more effective, safer, or convey other advantages over any products resulting from our technology. In addition, we also face competition on specific targets, including the target of our PYX-201 candidate, EDB, from Philogen S.p.A., the target of our PYX-202 candidate, DLK-1, from Chiome Bioscience, Inc., and the target of PYX-203 product candidate, CD123, from ImmunoGen, Inc., Vincerx Pharma, Inc., Macrogenics and Byondis B.V. Additionally, there is a wide array of activity in the development of immunotherapies for oncology which may be competitive with our preclinical discovery programs. Furthermore, if any of our product candidates are approved in oncology indications such as lung, hematological and other cancers, they may compete with existing approaches to treating cancer including surgery, radiation, and drug therapy, including conventional chemotherapy, biological products, and targeted drug small molecule therapies.

Many of our competitors have significantly greater scientific, research and development capabilities, as well as greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain licensure for any product candidate, we will face competition based on many different factors, including the safety, purity and potency of our products, the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory licenses 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 our 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.

Our biological product candidates for which we intend to seek licensure may face competition sooner than anticipated.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated licensure pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the licensure of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have an adverse effect on the future commercial prospects for our product candidates.

There is a risk that any product candidates we may develop that are licensed as a biological product under a BLA would not qualify for the 12-year period of exclusivity or that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider any product candidates we may develop to be reference products for competing products, potentially creating the opportunity for competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation, including litigation challenging the constitutionality of the ACA.

For example, in December 2018, a federal district court ruled that the ACA, without the "individual mandate" penalty (which was repealed by Congress as part of the Tax Cuts and Jobs Act), is unconstitutional in its entirety. In December 2019, the U.S. Court of Appeals for the 5th Circuit upheld the district court ruling that the individual mandate provisions are unconstitutional and remanded the case back to the district court for further analysis of whether such provisions could be severed from the remainder of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the case without specifically ruling on the constitutionality of the ACA. There may, however, be other efforts to challenge, repeal, or replace the ACA in the future. We continue to evaluate the effect that the ACA and its possible repeal and replacement has (or may have) on our business and exclusivity under the BPCIA. It is uncertain the extent to which any such changes may impact our business or financial condition.

Our business entails a significant risk of product liability, and if we are unable to obtain sufficient insurance coverage, such failure could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We expect to be exposed to significant product liability risks inherent in the development, testing and manufacturing of our product candidates and products, if approved. Product liability claims could delay or prevent completion of product candidate development programs. If we succeed in marketing products, such claims could result in an FDA investigation of the safety and effectiveness of our products, our third-party manufacturer's manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, including limitations on the approved indications for which our product candidates may be used or suspension or withdrawal of licenses. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our stock price. In addition, we may be subject to liability based on the actions of our existing or future collaborators in connection with their development of products using the FACT platform. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain 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.

Risks Related to Regulatory Licensure or Approval and Other Legal Compliance Matters

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

The time required to obtain approval or licensure by the FDA and other comparable regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval and licensure policies, regulations or the type and amount of clinical data necessary to gain approval or licensure may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained marketing approval or licensure for any product candidate and it is possible that none of our existing product candidates, or any product candidates we may seek to develop in the future, will ever obtain marketing approval or licensure.

Our product candidates could fail to receive marketing licensure in the United States for many reasons, including the following:

- the FDA may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA that a product candidate is safe, pure, and potent;
- results of clinical trials may not meet the level of statistical significance required by the FDA for licensure;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA may disagree with our interpretation of data from preclinical studies or clinical trials;
- data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA to the FDA or other submission or to obtain marketing licensure in the United States;
- the FDA may find deficiencies with or fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the licensure policies or regulations of the FDA may significantly change in a manner rendering our clinical data insufficient for licensure.

This lengthy licensure process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory licensure to market any of our product candidates, which would significantly harm our business, results of operations, financial condition and prospects. The FDA has substantial discretion in the licensure process and determining when or whether regulatory licensure will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support licensure by the FDA.

In addition, even if we were to obtain licensure, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant a license contingent on the performance of costly postmarketing clinical trials, or may approve or license a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

Even if we obtain FDA licensure for any of our product candidates in the United States, we may never obtain approval or licensure for or commercialize any of them in any other jurisdiction, which would limit our ability to realize their full market potential.

In order to market any products in any particular jurisdiction, we must establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety, purity, potency and efficacy.

Licensure by the FDA in the United States does not ensure approval or licensure by regulatory authorities in other countries or jurisdictions. However, the failure to obtain approval or licensure in one jurisdiction may negatively impact our ability to obtain approval or licensure elsewhere. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval or licensure in one country does not guarantee regulatory approval or licensure in any other country.

Approval or licensure processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval or licensure could result in difficulties and increased costs for us and require additional preclinical studies or clinical trials which

could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved or licensed for sale in any jurisdiction, including in international markets, and we do not have experience in obtaining regulatory approval or licensure in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals or licensures, or if regulatory approvals or licensures in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of any product we develop will be unrealized.

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

If any of our product candidates are licensed or approved by regulatory authorities, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of postmarketing studies, track and trace, serialization, postmarket adverse event reporting, and submission of safety, purity, potency, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-licensure.

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

Any regulatory licenses that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of licensure, or contain requirements for potentially costly postmarketing testing, including Phase 4 clinical trials and surveillance to monitor the safety, purity, and potency of the product candidate. The FDA may also require a REMS program as a condition of licensure of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Comparable foreign regulatory authorities may also have programs similar to REMS. In addition, if the FDA or a comparable foreign regulatory authority licenses or approves our product candidates, we will have to comply with requirements including submissions of safety and other postmarketing information and reports and registration.

Clinical trials of our product candidates must be conducted in carefully defined subsets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If one or more of our product candidates receives marketing licensure and we, or others, discover that the biological product is less effective than previously believed or causes undesirable side effects that were not previously identified, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their licensure of the biological product or seize the biological product;
- we, or any future collaborators, may be required to recall the biological product, change the way the biological product is administered or conduct additional clinical trials;

- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the particular biological product;
- 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 “black box” warning or a contraindication;
- we, or any future collaborators, may be required to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution to patients;
- we, or any future collaborators, could be sued and held liable for harm caused to patients;
- the biological product may become less competitive in the marketplace; and
- our reputation may suffer.

Any of these events could have a material and adverse effect on our operations and business and could adversely impact our stock price.

The FDA also may impose requirements for costly postmarketing studies or clinical trials and surveillance to monitor the safety, purity, or potency of the product, including the adoption and implementation of REMS. The FDA and other agencies, including the DOJ, closely regulate and monitor the post-licensure marketing and promotion of biological products to ensure they are marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA and DOJ impose stringent restrictions on manufacturers’ communications regarding off-label use, and if we do not market our products only for the approved indications, we may be subject to enforcement action for off-label marketing. Violations of the Federal Food, Drug and Cosmetic Act, or FDCA, and other statutes, including the False Claims Act, relating to the promotion and advertising of prescription drugs may lead to investigations and enforcement actions alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws.

We, and any collaborators, must comply with requirements concerning advertising and promotion for any of our product candidates for which we or they obtain marketing licensure. Promotional communications with respect to prescription biological products are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product’s approved labeling. Thus, we, and any collaborators, will not be able to promote any products we develop for indications or uses for which the biological product is not licensed. The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses and a company that is found to have improperly promoted off-label uses may be subject to significant liability. However, physicians may, in their independent medical judgment, prescribe legally available products for off-label uses. The FDA does not regulate the behavior of physicians in their choice of treatments, but the FDA does restrict manufacturer’s communications on the subject of off-label use of their products. The policies of the FDA and of comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory licensure of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing licensure that we may have obtained and we may not achieve or sustain profitability.

In addition, later discovery of previously unknown side effects or other problems with our products or their manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;

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

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

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

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population (as explained further below), also can result in significant financial penalties, and non-compliance with pediatric requirements may prevent regulatory approvals from being granted. Similarly, failure to comply with the European Union and UK’s requirements regarding the protection of personal information can lead to significant penalties and sanctions.

A Breakthrough Therapy designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or licensure process and it does not increase the likelihood that our product candidates will receive marketing licensure.

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

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy designation for a product candidate may not result in a faster development process, review or licensure compared to candidate products considered for licensure under non-expedited FDA review procedures and does not assure ultimate licensure by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the product no longer meets the conditions for qualification. Thus, even though we intend to seek Breakthrough Therapy designation for some or all of our future product candidates for the treatment of various cancers, there can be no assurance that we will receive Breakthrough Therapy designation.

A Fast Track designation by the FDA, even if granted for other current or future product candidates, may not lead to a faster development or regulatory review, licensure process and does not increase the likelihood that our product candidates will receive marketing licensure.

We may seek Fast Track designation for one or more of our future product candidates. If a drug or biological product is intended for the treatment of a serious or life-threatening disease or condition and it demonstrates the potential to address unmet medical needs for such a disease or condition, the drug sponsor may apply for FDA Fast Track designation for a particular indication. We may seek Fast Track designation for our product candidates, but there is no assurance that the FDA will grant this designation to any of our proposed product candidates. Marketing applications submitted by sponsors of products in Fast Track development may qualify for priority review under the policies and procedures offered by the FDA, but the Fast Track designation does not assure any such qualification or ultimate marketing licensure by the FDA. The FDA has broad discretion whether or not to grant Fast Track designation, so even if we believe a particular product candidate is eligible for this designation, there can be no assurance that the FDA would decide to grant it. Even if we do receive Fast Track designation, we may not experience a faster development process, review or licensure compared to conventional FDA procedures or pathways and receiving a Fast Track designation does not provide assurance of ultimate FDA licensure. In addition, the FDA may withdraw Fast Track designation if it believes that the designation is no longer supported by data from our clinical development program. In addition, the FDA may withdraw any Fast Track designation at any time.

If we decide to seek Orphan Drug Designation for any of our current or future product candidates, we may be unsuccessful or may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for supplemental market exclusivity.

We may seek Orphan Drug Designation for one or more of our current or future product candidates. Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs or

biological products for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the drug in the United States will be recovered from sales in the United States for that drug or biological product. In the United States, Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. After the FDA grants Orphan Drug Designation, the identity of the drug or biological product and its potential orphan use are disclosed publicly by the FDA. Orphan Drug Designation does not convey any advantage in, or shorten the duration of, the regulatory review and licensure process.

If a product that has Orphan Drug Designation subsequently receives the first FDA approval or licensure for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including an NDA or BLA, to market the same drug or biological product for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the biological product was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve or license other drugs or biological products that have a different active ingredient for use in treating the same indication or disease. Further, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product.

We may seek Orphan Drug Designation for our product candidates in additional orphan indications in which there is a medically plausible basis for the use of these product candidates. Even when we obtain Orphan Drug Designation, exclusive marketing rights in the United States may be limited if we seek licensure for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we, through our manufacturer, are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. In addition, although we intend to seek Orphan Drug Designation for other product candidates, we may never receive these designations.

Accelerated approval by the FDA, even if granted, may not lead to a faster development or regulatory review or approval process and it does not increase the likelihood that our product candidates will receive marketing licensure. If we are unable to obtain licensure of our products through the Accelerated Approval Program in the United States, we may be required to conduct additional nonclinical and clinical studies and trials beyond those that we currently contemplate, which could increase the expense of obtaining, reduce the likelihood of obtaining and/or delay the timing of obtaining, necessary marketing licensure. Even if we receive accelerated approval from the FDA through the Accelerated Approval Program, if our confirmatory postmarketing trial does not verify clinical benefit, or if we do not comply with rigorous postmarketing requirements, the FDA may seek to withdraw accelerated approval.

We plan to seek accelerated approval of PYX-201, PYX-202 and PYX-203 and may seek approval of future product candidates using the FDA's accelerated approval pathway. For any licensure to market a biological product, we must provide the FDA and foreign regulatory agencies with clinical data that adequately demonstrate the safety, purity, and potency of the product for the indication applied for in the BLA or other respective regulatory filings. As described in the "Business—Government Regulation" section, the Accelerated Approval Program is one of several approaches used by the FDA to make prescription drugs or biological products more rapidly available for the treatment of serious or life-threatening diseases. Section 506(c) of the FDCA provides that the FDA may grant accelerated approval to "a product for a serious or life-threatening condition upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into

account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments." Licensure through the Accelerated Approval Program is subject, however, to the requirement that a sponsor perform adequate and well controlled postmarketing clinical trials to verify and describe the drug's clinical benefit, where there is uncertainty as to the relationship of the surrogate endpoint to the clinical benefit, or of the observed clinical endpoint to ultimate outcome. Typically, clinical benefit is verified when postmarketing clinical trials show that the biological products provides a clinically meaningful positive therapeutic effect, that is, an effect on how a patient feels, functions, or survives. These confirmatory trials must be completed with due diligence. If such confirmatory postmarketing trial fails to confirm the product's clinical profile or risks and benefits, the FDA may withdraw accelerated approval of the product.

The FDA has broad discretion with regard to licensure through the Accelerated Approval Program, and even if we believe that the Accelerated Approval Program is appropriate for one of our products, we cannot assure you that the FDA will ultimately agree. Furthermore, even if we do obtain licensure through the Accelerated Approval Program, we may not experience a faster development process, review, or licensure compared to conventional FDA procedures.

Even if the FDA reviews a BLA seeking accelerated approval, there can be no assurance that licensure will be granted on a timely basis, or at all. The FDA may disagree that the design of, or results from, our studies support accelerated approval. Additionally, the FDA could require us to conduct further studies or trials prior to granting licensure of any type, including by determining that licensure through the Accelerated Approval Program is not appropriate and that our clinical trials may not be used to support licensure through the conventional pathway. We might not be able to fulfill the FDA's requirements in a timely manner, which would cause delays, or licensure might not be granted because our submission is deemed incomplete by the FDA. There also can be no assurance that after subsequent FDA feedback we will continue to pursue licensure through the Accelerated Approval Program. A failure to obtain licensure through the Accelerated Approval Program could result in a longer time period to obtain licensure of our products, could increase the cost of its development, could delay our ability to commercialize our products and could significantly harm our financial position and competitive position in the marketplace.

Even if we receive licensure for one of our products through the Accelerated Approval Program, we will be subject to rigorous postmarketing requirements, including the completion of one or more confirmatory postmarketing trials as the FDA may require, to verify the clinical benefit of the product, and submission to the FDA of all promotional materials prior to their dissemination. These requirements could adversely impact the timing of the commercial launch of the product. Even if we do receive accelerated approval, we may not experience a faster development or regulatory review or licensure process. Further, receiving accelerated approval does not provide assurance of ultimate full FDA licensure.

The FDA could seek to withdraw accelerated approval for multiple reasons, including if we fail to conduct any required confirmatory postmarketing trial with due diligence, our confirmatory postmarketing trial does not confirm the predicted clinical benefit, other evidence shows that the product is not safe, pure, or potent under the conditions of use, or we disseminate promotional materials that are found by the FDA to be false and misleading.

Any delay in obtaining, or inability to obtain, licensure through the Accelerated Approval Program would delay or prevent commercialization of our products, and would materially adversely affect our business, financial condition, results of operations, cash flows and prospects.

If foreign regulatory authorities approve biosimilar versions of any of our product candidates that receive marketing approval, or such authorities do not grant our product candidates appropriate periods of data or market exclusivity before approving generic versions of our product candidates, the sales of our product candidates could be adversely affected.

In the European Union and the UK, innovative medicinal products are authorized based on a full marketing authorization application (as opposed to an application for marketing authorization that relies on data in the

marketing authorization dossier for another, previously approved medicinal product). Applications for marketing authorization for innovative medicinal products must contain, *inter alia*, the results of pharmaceutical tests, preclinical tests and clinical trials conducted with the medicinal product for which marketing authorization is sought (and where applicable the results of the pediatric studies unless a waiver or a deferral has been obtained— as described further below).

A marketing authorization can be obtained via the centralized procedure or the national procedure. The centralized procedure results in a single marketing authorization, issued by the European Commission (based on the opinion of the EMA), which is valid across the entire European Economic Area, which comprises the EU, Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for human drugs that are: (i) derived from biotechnology processes, such as genetic engineering, (ii) contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative diseases, autoimmune and other immune dysfunctions and viral diseases, (iii) designated orphan medicines and (iv) advanced-therapy medicines, such as gene therapy, somatic cell therapy or tissue-engineered medicines. The centralized procedure may at the request of the applicant also be used in certain other cases. Therefore, the centralized procedure would be mandatory for the product candidates we are developing.

Where an applicant for a marketing authorization submits a full dossier containing its own pharmaceutical, preclinical tests and clinical trials data, and where the application does not fall within the 'global marketing authorization' of an existing medicinal product, reference product candidates may receive eight years of data exclusivity and an additional two years of market exclusivity, upon grant of the marketing authorization. If granted, during the data exclusivity period, applicants for approval of biosimilars cannot rely on data contained in the marketing authorization dossier submitted for the already authorized, or reference product candidate, to support their application. The market exclusivity period prevents a successful biosimilar applicant from commercializing its product in the EU until 10 years have elapsed from the initial marking authorization of the reference product in the EU, but a biosimilar marketing authorization application can be submitted during this time. The overall 10-year market exclusivity period can further be extended by one more year if, during the first eight years of those 10 years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. However, even if a compound is considered to be a new active substance and the innovator is able to gain the period of data and market exclusivity, provided that no other IP or regulatory exclusivities apply, another unrelated company could also apply for a marketing authorization and market another competing medicinal product for the same therapeutic indication if such company obtained its own marketing authorization based on a separate marketing authorization application based on a full self-standing scientific data package supporting the application.

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 test 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 products. There are currently no such guidelines for complex biological products such as gene or cell therapy medicinal products, and so in the short term it is unlikely that biosimilars of those products will 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.

In the EU, marking authorization applications for new medicinal products must include the results of clinical trials conducted in pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee, or PDCO. The PDCO can grant waivers or deferrals to these requirements in certain circumstances (for example, a waiver may be obtained if the condition only occurs in adult populations). Where required, pediatric studies must cover all sub-sets of the pediatric population for both existing and new indications, pharmacological forms and route of administrations. Limited further exclusions

apply, including in relation to biosimilar applications. Certain incentives may be available for completion of pediatric studies. For example, once the marketing authorization is obtained in all Member States and study results are included in the product information, even when negative, the product is eligible for a six-months supplementary protection certificate extension (if any is in effect at the time of approval) or, in the case of orphan pharmaceutical products, a two year extension of the orphan market exclusivity is granted.

In the EU, the criteria for designating an "orphan medicinal product" are similar in principle to those in the United States. A medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the EU when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the EU to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU, or if such a method exists, the product will be of significant benefit to those affected by the condition. The application for orphan drug designation must be submitted before the marketing authorization application. Orphan drug designations entitle a party to financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to 10 years of market exclusivity. During the 10-year market exclusivity period, the EMA cannot accept another marketing authorization application, or grant a marketing authorization or accept an application to extend an existing marketing authorization, for the same therapeutic indication, in respect of a similar medicinal product. An orphan medicinal product can also obtain an additional two years of market exclusivity in the European Union for pediatric studies. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The ten-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. At any time, a marketing authorization may be granted to a similar product for the same indication if:

(1) the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;

(2) the holder of the marketing authorization for the original orphan medicinal product has given his consent to the second applicant; or

(3) the holder of the marketing authorization for the original orphan medicinal product is unable to supply sufficient quantities of the medicinal product.

Although the United Kingdom has left the EU, its regulatory legal framework provides for similar periods of protection (namely regulatory data exclusivity, marketing protection and market exclusivity).

Competition that our product candidates may face from biosimilar versions of our product candidates could materially and adversely impact our future revenue, profitability and cash flows and substantially limit our ability to obtain a return on the investments we have made in those product candidates. Our future revenues, profitability and cash flows could also be materially and adversely affected and our ability to obtain a return on the investments we have made in those product candidates may be substantially limited if our product candidates, if and when approved, are not afforded the appropriate periods of non-patent exclusivity.

The failure to obtain required regulatory clearances or approvals for any companion diagnostic tests that we may pursue may prevent or delay approval of any of our product candidates. Moreover, the commercial success of any of our product candidates that require a companion diagnostic will be tied to the receipt of any required regulatory clearances or approvals and the continued availability of such tests.

In connection with the clinical development of our product candidates for certain indications, we may work with collaborators to develop or obtain access to companion diagnostic tests to identify appropriate patients for

our product candidates. We may rely on third parties for the development, testing and manufacturing of these companion diagnostics, the application for and receipt of any required regulatory clearances or approvals, and the commercial supply of these companion diagnostics. The FDA and foreign regulatory authorities regulate companion diagnostics as medical devices that will likely be subject to clinical trials in conjunction with the clinical trials for product candidates, and which will require separate regulatory clearance or approval prior to commercialization. This process could include additional meetings with health authorities, such as a pre-submission meeting and the requirement to submit an investigational device exemption. In the case of a companion diagnostic that is designated as "significant risk device," approval of an investigational device exemption by the FDA and IRB is required before such diagnostic is used in conjunction with the clinical trials for a corresponding product candidate. We or our third-party collaborators may fail to obtain the required regulatory clearances or approvals, which could prevent or delay approval of our product candidates. In addition, the commercial success of any of our product candidates that require a companion diagnostic will be tied to and dependent upon the receipt of required regulatory clearances or approvals and the continued ability of such third parties to make the companion diagnostic commercially available to us on reasonable terms in the relevant geographies.

If we are required to in the future and if we are unable to successfully develop companion diagnostic tests for our product candidates that require such tests, or experience significant delays in doing so, we may not realize the full commercial potential of these product candidates.

We may be required by the FDA to develop, either by ourselves or with collaborators, companion diagnostic tests for our product candidates for certain indications. To be successful, we or our collaborators will need to address a number of scientific, technical, regulatory and logistical challenges. We have no prior experience with medical device or diagnostic test development. If we choose to develop and seek FDA clearance or approval for companion diagnostic tests on our own, we will require additional personnel. We may rely on third parties for the design, development and manufacture of companion diagnostic tests for our therapeutic product candidates that require such tests. If these parties are unable to successfully develop companion diagnostics for these therapeutic product candidates, or experience delays in doing so, we may be unable to enroll enough patients for our current and planned clinical trials, the development of these therapeutic product candidates may be adversely affected, these therapeutic product candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutics that obtain marketing approval. Any failure to successfully develop this companion diagnostic may cause or contribute to delayed enrollment of this trial, and may prevent us from initiating or completing further clinical trials to support marketing approval for our product candidates. As a result, our business, results of operations and financial condition could be materially harmed.

Our relationships with customers, physicians and third-party payors are subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and other healthcare laws and regulations. If we are unable to comply or have not fully complied with these laws, we could face substantial penalties.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing licensure. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors subject us to various federal and state fraud and abuse laws and other healthcare laws that may constrain the business or financial arrangements and relationships through which we research, develop, sell, market and distribute our product candidates, if we obtain marketing licensure. In particular, the research of our product candidates, as well as the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed 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, structuring and commission(s), certain customer incentive programs and other business or financial arrangements.

The applicable federal, state and foreign healthcare laws and regulations that may affect our operations include, but are not limited to those described under the section titled “Business—Government Regulation” in this prospectus.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm and the curtailment or restructuring of our operations.

If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Even if resolved in our favor, litigation or other legal proceedings relating to healthcare laws and regulations may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development, manufacturing, sales, marketing or distribution activities. Uncertainties resulting from the initiation and continuation of litigation or other proceedings relating to applicable healthcare laws and regulations could have an adverse effect on our ability to compete in the marketplace.

The successful commercialization of our product candidates in the United States and elsewhere will depend in part on the extent to which third-party payors, including governmental authorities and private health insurers, provide coverage and adequate reimbursement levels, as well as implement pricing policies favorable for our product candidates. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory licensure. In the United States and in other countries, 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. The availability of coverage and adequacy of reimbursement for our products by third-party payors, including government health care programs (e.g., Medicare, Medicaid or TRICARE), managed care providers, private health insurers, health maintenance organizations and other organizations is essential for most patients to be able to afford medical services and pharmaceutical products such as our product candidates. Third-party payors decide which medications they will pay for and establish reimbursement levels.

Our ability to successfully commercialize our product candidates will depend, in part, on the extent to which coverage and adequate reimbursement for any products for which we obtain marketing authorization will be available from third-party payors. In the United States, no uniform policy for coverage and reimbursement for pharmaceutical products exists among third-party payors. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting reimbursement policies, but also have their own methods and approval processes apart from Medicare coverage and reimbursement determinations. Therefore, coverage and

reimbursement for products for which we may obtain marketing authorization could differ significantly from payor to payor. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product. Payors consider a number of factors when determining whether to cover a new product, including, for example, whether the product is a covered benefit under its health plan; safe, effective and medically necessary; appropriate for the specific patient; cost-effective; and neither experimental nor investigational. Third-party payors may also limit coverage to specific products on an approved list, or formulary, which might not include all of the FDA-approved products for a particular indication.

Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment. A decision by a third-party payor not to cover or not to separately reimburse for any products for which we may obtain marketing authorization could reduce physician utilization of such products. If coverage and adequate reimbursement are not available, or are available only to limited levels, we may not be able to successfully commercialize our product candidates. We cannot be sure that coverage and reimbursement in the United States will be available for our current or future product candidates or for any procedures using our current or future product candidates, and any reimbursement that may become available may not be adequate or may be decreased or eliminated in the future. Moreover, for products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself may or may not be available. Instead, the hospital or administering physician may be reimbursed only for providing the treatment or procedure in which our product is used.

Further, increasing efforts by third-party payors in the United States and abroad to cap or reduce healthcare costs may cause payor organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. In order to secure coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA or comparable marketing authorizations or approvals. Additionally, we may also need to provide discounts to purchasers, private health plans or government healthcare programs. Our product candidates may nonetheless not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after marketing authorization or approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit. We expect to experience pricing pressures from third-party payors in connection with the potential sale of any of our product candidates.

Lastly, in some foreign countries, the proposed pricing for a drug must be approved before the drug may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, countries in the European Union Member States can restrict the range of medicinal products for which their national health insurance systems provide reimbursement and they can control the prices of medicinal products for human use. To obtain reimbursement or pricing approval, some of these Member States may require the completion of clinical trials that compare the cost effectiveness of a particular product candidate to currently available therapies. An European Union Member State may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. Approaches between European Union Member States are diverging. For example, in France, effective market access will be supported by agreements with hospitals and products may be reimbursed by the Social Security Fund. The price of medicines is negotiated with the Economic Committee for Health Products, or CEPs. There can be no assurance that any country that has price controls or reimbursement

limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our product candidates. Historically, products launched in the European Union do not follow price structures of the United States and generally prices in the European Union tend to be significantly lower than prices in the United States.

Enacted and future healthcare legislation may increase the difficulty and cost for us to progress our clinical programs and obtain marketing licensure or approval of and commercialize our product candidates and may affect the prices we may set.

In the United States and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect results of our future operations. In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the ACA was enacted, which substantially changed the way healthcare is financed by both governmental and private payors. The ACA contained a number of provisions, including those governing the federal healthcare programs, provider reimbursement, and healthcare fraud and abuse laws. For example, the ACA:

- increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the average manufacturer price, or AMP;
- required collection of rebates for drugs paid by Medicaid managed care organizations;
- expanded beneficiary eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 138% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- extended manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expanded the types of entities eligible for the 340B Drug Pricing Program;
- established a new methodology by which rebates owed by manufacturers under the Medicaid Drug and Rebate Program, or MDRP, are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- required manufacturers to participate in a coverage gap discount program, under which they must agree to offer 70 percent point-of-sale discounts off negotiated prices of applicable branded drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell "branded prescription drugs" and biologic agents apportioned among these entities according to their market share in certain federal government programs;
- established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending;
- created the Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- required reporting of certain financial arrangements between manufacturers of drugs, biological products, devices, and medical supplies and physicians and teaching hospitals under the federal Physician Payments Sunshine Act; and
- required annual reporting of certain information regarding drug samples that manufacturers and distributors provide to licensed practitioners.

Since its enactment, there have been judicial, legislative, and executive branch challenges to certain aspects of the ACA, and on June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden had issued an executive order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, policies that create barriers to obtaining access to health insurance coverage through the ACA marketplaces. It is unclear how healthcare reform measures enacted by Congress or implemented by the Biden administration or other efforts to challenge, repeal or replace the ACA, if any, will impact the ACA.

Other legislative changes have been proposed and adopted in the U.S. since the ACA was enacted. These changes include the Budget Control Act of 2011, which, among other changes, led to aggregate reductions of Medicare payments to providers of up to 2% per fiscal year that started in April 2013 and, due to subsequent legislation, will continue into 2031, with the exception of a temporary suspension of the payment reduction from May 1, 2020 through December 31, 2021 due to the COVID-19 pandemic, unless additional Congressional action is taken.

The cost of prescription drugs has been the subject of considerable policy discussion and debate in the United States. This has resulted in several U.S. Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, and review the relationship between pricing and manufacturer patient programs. While several proposed reform measures will require Congress to pass legislation to become effective, Congress and the Biden administration have expressed support for legislative and/or administrative measures to address prescription drug costs. Since the Presidential inauguration, the Biden administration has taken several executive actions that signal changes in policy from the prior administration, including with respect to executive actions by the Trump administration related to prescription drug costs. Additionally, the American Rescue Plan Act of 2021 was recently signed into law, which, among other things, eliminated the statutory cap on drug manufacturers' MDRP rebate liability, effective January 1, 2024. Under current law enacted as part of the ACA, drug manufacturers' MDRP rebate liability is capped at 100% of AMP for a covered outpatient drug.

Individual states in the U.S. have also increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures; and, in some cases, encourage importation from other countries and employ bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions could adversely affect our business prospects, financial condition, and results of operations. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates or put pressure on our product pricing.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the extent to which state and federal governments cover particular healthcare products and services and could limit the amounts that federal and state governments will pay for healthcare items and services. This could result in reduced demand for any product candidate we develop or could result in additional pricing pressures.

In markets outside of the United States, reimbursement and healthcare payment systems vary significantly by country and many countries have instituted price ceilings on specific products and therapies. The price control regulations outside of the United States can have a significant impact on the profitability of a given market, and further uncertainty is introduced if and when these laws change. For example, in Canada, price control legislation for patented medicines is currently undergoing significant change that may have significant effects on profitability for companies selling products in Canada.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States or any other jurisdiction. It is possible that additional governmental action will be taken to address the COVID-19 pandemic. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or these third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory licensure or approval that may have been obtained and we may not achieve or sustain profitability.

Actual or perceived failures to comply with applicable data protection, privacy and security laws, regulations, standards and other requirements could adversely affect our business, operations, and financial condition.

The global data protection landscape is rapidly evolving and we may be or become subject to or affected by numerous federal, state and foreign laws and regulations, as well as regulatory guidance, governing the collection, use, disclosure, transfer, security and processing of personal information, such as information that we collect about participants and healthcare providers in connection with clinical trials. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, which may create uncertainty in our business, affect our or our service providers' ability to operate in certain jurisdictions or to collect, store, transfer use and share personal data, result in liability or impose additional compliance or other costs on us. Any failure or perceived failure by us to comply with federal, state or foreign laws or self-regulatory standards could result in negative publicity, diversion of management time and effort and proceedings against us by governmental entities or others.

As our operations and business grow, we may become subject to or affected by new or additional data protection laws and regulations and face increased scrutiny or attention from regulatory authorities. In the United States, most healthcare providers, including certain research institutions from which we may obtain patient health information, are subject to privacy and security regulations promulgated under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, which we collectively refer to as HIPAA. We are not currently acting as a covered entity or business associate under HIPAA and therefore are not directly regulated under HIPAA. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has disclosed individually identifiable health information in a manner that is not authorized or permitted under HIPAA. In addition, in the future, we may maintain sensitive personal information, including health-related information, that we receive throughout the clinical trial process, in the course of our research collaborations and/or directly from individuals (or their healthcare providers) who may enroll in patient assistance programs if we choose to implement these types of programs. As a result, we may be subject to data privacy and security laws protection such information, including state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA.

Further, the California Consumer Privacy Act of 2018, or the CCPA, went into effect in January 2020, which creates individual data privacy rights for consumers and operational requirements for companies, including placing increased privacy and security obligations on entities handling certain personal information of consumers or households. These requirements could increase our compliance costs and potential liability. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. While there is currently an exception for protected health information maintained by a business associate or covered entity as well as an exception for clinical trial data, as currently written, the CCPA may impact certain of our business activities. Further, the California Privacy Rights Act, or CPRA, recently passed in California. The CPRA will impose additional data protection obligations on

covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. In the event that we are subject to or affected by HIPAA, the CCPA, the CPRA or other domestic privacy and data protection laws, any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

In addition, the European Union General Data Protection Regulation, or GDPR, went into effect on May 2018 and imposes strict requirements for processing the personal data of individuals within the European Economic Area, or the EEA. Companies that must comply with the GDPR face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance of up to €20 million or 4% of the annual global revenues of the noncompliant company, whichever is greater. Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the United States, and the efficacy and longevity of current transfer mechanisms between the European Union and the United States remains uncertain. For example, in 2016, the European Union and United States agreed to a transfer framework for data transferred from the European Union to the United States, called the Privacy Shield, but the Privacy Shield was invalidated in July 2020 by the Court of Justice of the European Union. Further, from January 1, 2021, companies have to comply with the GDPR and also the United Kingdom GDPR, or the UK GDPR, which, together with the amended United Kingdom Data Protection Act 2018, retains the GDPR in United Kingdom national law. The UK GDPR mirrors the fines under the GDPR, i.e., fines up to the greater of €20 million (£17.5 million) or 4% of global turnover. The relationship between the United Kingdom and the European Union in relation to certain aspects of data protection law remains unclear, and it is unclear how United Kingdom data protection laws and regulations will develop in the medium to longer term. The European Commission has adopted an adequacy decision in favor of the UK, enabling data transfers from EU member states to the UK without additional safeguards. However, the UK adequacy decision will automatically expire in June 2025 unless the European Commission re-assesses and renews/extends that decision, and remains under review by the Commission during this period. These changes may lead to additional costs and increase our overall risk exposure.

Although we work to comply with applicable laws, regulations and standards, our contractual obligations and other legal obligations, these requirements are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another or other legal obligations with which we must comply. Any failure or perceived failure by us or our employees, representatives, contractors, consultants, collaborators, or other third parties to comply with such requirements or adequately address privacy and security concerns, even if unfounded, could result in additional cost and liability to us, damage our reputation, and adversely affect our business and results of operations.

If we or our third-party manufacturers and suppliers fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have an adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our research and development activities involve the use of biological and hazardous materials and produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we

believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. Upon an event of this nature, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Further, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of any changes of this nature and cannot be certain of our future compliance. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological waste or hazardous waste insurance coverage, workers compensation or property and casualty and general liability insurance policies that include coverage for damages and fines arising from biological or hazardous waste exposure or contamination.

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, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act of 2001 and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties for clinical trials outside of the United States, to sell our products abroad once we enter a commercialization phase and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We may also have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other collaborators, even if we do not explicitly authorize or have actual knowledge of these activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Risks Related to Employee Matters, Managing Our Growth and Other Risks Related to our Business

If we fail to attract and retain qualified senior management and key scientific personnel, our business may be materially and adversely affected.

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management and clinical and scientific personnel. We are highly dependent upon members of our senior management, including Lara Sullivan, M.D., our Chief Executive Officer, Pamela Connealy, our Chief Financial Officer, Ronald Herbst, Ph.D., our Chief Scientific Officer, Jay Feingold M.D., Ph.D., our Chief Medical Officer

and Ritu Shah, our Chief Operating Officer, as well as our senior scientists and other members of our senior management team. The loss of services of any of these individuals could delay or prevent the successful development of our product pipeline, the initiation and completion of our planned clinical trials or the commercialization of product candidates or any future product candidates.

Competition for qualified personnel in the pharmaceutical, biopharmaceutical and biotechnology field is intense due to the limited number of individuals who possess the skills and experience required by our industry. We will need to hire additional personnel as we expand our clinical development and if we initiate commercial activities. We may not be able to attract and retain quality personnel on acceptable terms, or at all. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output.

If our product candidates advance into clinical trials, we may experience difficulties in managing our growth and expanding our operations.

As of September 15, 2021, we had 38 full-time employees. As our development and commercialization plans and strategies develop, and as we transition into operating as a public company, we expect to expand our employee base for managerial, operational, financial and other resources. In addition, we have limited experience in product development. As our product candidates enter and advance through preclinical studies and clinical trials, we will need to expand our development, regulatory and manufacturing capabilities or contract with other organizations to provide these capabilities for us. In the future, we expect to have to manage additional relationships with collaborators or partners, suppliers and other organizations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls. Our inability to successfully manage our growth and expand our operations could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We currently have no marketing, sales, or distribution infrastructure and we intend to either establish a sales and marketing infrastructure or outsource this function to a third party. Either of these commercialization strategies carries substantial risks to us.

We currently have no marketing, sales, and distribution capabilities because all our product candidates are still in preclinical development. If any of our product candidates complete clinical development and are approved, we intend to either establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates in a legally compliant manner, or to outsource this function to a third party. There are risks involved if we decide to establish our own sales and marketing capabilities or enter into arrangements with third parties to perform these services. To the extent that we enter into collaboration agreements with respect to marketing, sales or distribution, our product revenue may be lower than if we directly marketed or sold any approved products. Such collaborative arrangements with partners may place the commercialization of our products outside of our control and would make us subject to a number of risks, including that we may not be able to control the amount or timing of resources that our collaborative partner devotes to our products or that our collaborator’s willingness or ability to complete its obligations, and our obligations under our arrangements may be adversely affected by business combinations or significant changes in our collaborator’s business strategy.

If we are unable to enter into these arrangements on acceptable terms or at all, we may not be able to successfully commercialize any approved products. If we are not successful in commercializing any approved products, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses, which would have a material adverse effect on our business, financial condition, and results of operations.

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

In the ordinary course of our business, we collect, process, and store proprietary, confidential, and sensitive information, including personal information (including health information), intellectual property, trade secrets, and proprietary business information owned or controlled by ourselves or other parties.

Despite the implementation of security measures, our internal computer systems and those of our current and any future CROs, manufacturers, other contractors, consultants, existing or future collaborators and other third-party service providers are vulnerable to damage from various methods, including cybersecurity attacks, breaches, intentional or accidental mistakes or errors, or other technological failures, which can include, among other things, computer viruses, unauthorized access attempts, including third parties gaining access to systems using stolen or inferred credentials, ransomware attacks, denial-of-service attacks, phishing attempts, service disruptions, natural disasters, fire, terrorism, war and telecommunication and electrical failures. As the cyber-threat landscape evolves, these attacks are growing in frequency, sophistication and intensity, and are becoming increasingly difficult to detect. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period.

If such an event were to occur and cause interruptions in our operations or result in the unauthorized acquisition of or access to personally identifiable information or individually identifiable health information, it could result in a material disruption of our product candidate development programs and our business operations including without limitation, disruptions of our drug development programs, delays in our regulatory approval efforts, regulatory investigations or enforcement actions, litigation, indemnity obligations, negative publicity, and financial loss and significant liabilities. In addition, system failures could cause the loss, theft, exposure, or unauthorized access or use of valuable clinical trial data as a result of accidents, errors or malfeasance by our employees, independent contractors or others working with us or on our behalf or otherwise disrupt our clinical activities and be expensive and time-consuming to remedy. Some of the federal, state and foreign government legal requirements include obligations of companies to notify individuals of security breaches involving particular personally identifiable information, which could result from breaches experienced by us or by our vendors, contractors or organizations with which we have formed strategic relationships. Notifications and follow-up actions related to a security breach could impact our reputation and cause us to incur significant costs, including legal expenses and remediation costs. For example, the loss of clinical trial data from completed, ongoing or future clinical trials involving our product candidates could result in delays in our regulatory licensure efforts and significantly increase our costs to recover or reproduce the lost data. Any breach of our computer systems may result in a loss of data or compromised data integrity across many of our programs in various stages of development.

We may be required to expend resources, modify our business activities and practices, or modify our operations (including our development program activities) or information technology in an effort to comply with applicable data protection laws, privacy policies and data protection obligations.

While we have implemented security measures designed to protect against security breaches, there can be no assurance that our security measures or those of our service providers, partners and other third parties, will be effective in protecting against all security breaches and material adverse effects on our business that may arise from such breaches. The recovery systems, security protocols, network protection mechanisms and other security measures that we (and our third parties) have integrated into our platform, systems, networks and physical facilities, which are designed to protect against, detect and minimize security breaches, may not be adequate to prevent or detect service interruption, system failure, or data loss.

We will also rely on third parties to manufacture our product candidates, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data, or inappropriate disclosure of confidential or proprietary information, we could be exposed to litigation and governmental investigations, the further development and commercialization of our product candidates could be delayed and we could be subject to significant fines or penalties for any noncompliance with certain state, federal or international privacy and security laws.

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

We or the third parties upon whom we depend may be adversely affected by earthquakes, wildfires or other 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 epidemics or pandemics, 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 third-party contract manufacturers, 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. Loss of access to these facilities may result in increased costs, delays in the development of our product candidates or interruption of our business operations. Earthquakes, wildfires 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 prevented us from using all or a significant portion of our headquarters, damaged critical infrastructure, such as our research facilities or the manufacturing facilities of our third-party contract manufacturers, or otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. 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 third-party contract manufacturers, 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 and discovery programs may be harmed. Any business interruption may have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our business is subject to economic, political, regulatory and other risks associated with conducting business internationally.

We may seek regulatory approval or licensure of our product candidates outside of the United States. Accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals or licenses, including:

- differing regulatory requirements and reimbursement regimes in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;

- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the FCPA or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations may materially adversely affect our ability to attain or maintain profitable operations.

We face risks related to health epidemics and outbreaks, including the COVID-19 pandemic, which could significantly disrupt our preclinical studies and clinical trials, and therefore our receipt of necessary regulatory licensure or approvals could be delayed or prevented.

In December 2019, the coronavirus disease, COVID-19, was identified in Wuhan, China. Since then, COVID-19 has spread globally. In March 2020, the World Health Organization declared COVID-19 a global pandemic and the United States declared a national emergency with respect to COVID-19. In response to the COVID-19 pandemic, “shelter in place” orders and other public health guidance measures have been implemented across much of the United States, including in the locations of our offices and those of key vendors and partners. As a result of the COVID-19 pandemic, or similar pandemics, and related “shelter in place” orders and other public health guidance measures, we have and may in the future experience disruptions that could materially and adversely impact our preclinical studies and development, any clinical trials we subsequently commence, and our business, financial condition, and results of operations. Potential disruptions to our preclinical development efforts include, but are not limited to:

- delays or disruptions in preclinical experiments and IND-enabling studies due to restrictions of on-site staff, limited or no access to animal facilities, and unforeseen circumstances at CROs and vendors;
- limitations on employee or other resources that would otherwise be focused on the conduct of our preclinical work and any clinical trials we subsequently commence, including because of sickness of employees or their families, the desire of employees to avoid travel or contact with large groups of people, an increased reliance on working from home, school closures, or mass transit disruptions;
- delays in necessary interactions with regulators, ethics committees, and other important agencies and contractors due to limitations in employee resources or forced furlough of government or contractor personnel; and
- limitations in maintaining our corporate culture that facilitates the transfer of institutional knowledge within our organization and fosters innovation, teamwork, and a focus on execution.

We have not yet commenced clinical trial activities for any of our product candidates. If we commence clinical trials for one or more of our product candidates, potential disruptions of those clinical activities as a result of COVID-19 or similar pandemics include, but are not limited to:

- interruption of key clinical trial activities, such as clinical trial site data monitoring and efficacy, safety and translational data collection, processing and analyses, due to limitations on travel imposed or recommended by federal, state, or local governments, employers and others or interruption of clinical trial subject visits, which may impact the collection and integrity of subject data and preclinical study endpoints;
- delays or difficulties in initiating or expanding clinical trials, including delays or difficulties with clinical site initiation and recruiting clinical site investigators and clinical site staff;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or other health conditions or being forced to quarantine;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns, or stoppages and disruptions in materials and reagents;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption or delays in the operations of the FDA and comparable foreign regulatory agencies;
- changes in 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, or to discontinue the clinical trials altogether;
- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- limitations on employee resources that would otherwise be focused on the conduct of our preclinical studies and clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- refusal of the FDA or comparable regulatory authorities to accept data from clinical trials in affected geographies; and
- additional delays, difficulties or interruptions as a result of current or future shutdowns due to the COVID-19 pandemic in countries where we or our third-party service providers operate.

The COVID-19 global pandemic continues to rapidly evolve. Although many countries, including certain countries in Europe and the United States, have re-opened, rises in new cases have caused certain countries to re-initiate restrictions. The extent to which the outbreak may affect our preclinical studies, clinical trials, business, financial condition, and results of operations will depend on future developments, which are highly uncertain and cannot be predicted at this time, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions, and actions to contain the outbreak or treat its impact, such as social distancing and quarantines or lock-downs in the United States and other countries, business closures, or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease. Additionally, we are unable to predict if a different pandemic could have similar or different impacts on our business, financial condition, or share price. Future developments in these and other areas present material uncertainty and risk with respect to our clinical trials, business, financial condition, and results of operations.

Disruptions at the FDA, the SEC and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

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

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, in recent years, including in 2018 and 2019, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, upon completion of this offering and in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Separately, in response to the COVID-19 pandemic, on March 10, 2020, the FDA announced its intention to postpone most inspections of foreign manufacturing facilities, and on March 18, 2020, the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. On July 10, 2020, the FDA announced its intention to resume certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA intends to use this risk-based assessment system to identify the categories of regulatory activity that can occur within a given geographic area, ranging from mission critical inspections to resumption of all regulatory activities. Additionally, on April 15, 2021, the FDA issued a guidance document in which the FDA described its plans to conduct voluntary remote interactive evaluations of certain drug manufacturing facilities and clinical research sites. According to the guidance, the FDA intends to request such remote interactive evaluations in situations where an in-person inspection would not be prioritized, deemed mission-critical, or where direct inspection is otherwise limited by travel restrictions, but where the FDA determines that remote evaluation would still be appropriate. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business**.**

Risks Related to Our Dependence on Third Parties

If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting our product candidates or we could lose certain rights to grant sublicenses.

We are a party to license agreements with Pfizer, Inc., or Pfizer, LegoChem Biosciences, Inc., or LegoChem, and the University of Chicago, pursuant to which we in-license patents and technology for certain of our product candidates, and we are also party to a collaboration agreement with Alloy Therapeutics, Inc., or Alloy, pursuant to which we may license patents and technology for future product candidates. Our current

license agreements and our collaboration agreement impose, and any future license agreements or collaboration agreements we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement and/or other obligations on us. If we breach any of these obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license, which could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology or enable a competitor to gain access to the licensed technology. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

We have already entered into collaborations with third parties for the research, development and commercialization of certain of the product candidates we may develop. We may form or seek additional collaborations or strategic alliances or enter into additional licensing arrangements in the future. If any of these collaborations, strategic alliances or additional licensing arrangements are not successful, we may not be able to capitalize on the market potential of those product candidates.

We entered into a three-year collaboration with Alloy to finance and operate a joint venture company, which we refer to as the Alloy Pyxis JV, formed in collaboration with Alloy to leverage our site-specific target catalog and Alloy's ATX-Gx™ platform and antibody discovery services. We additionally may seek other third-party collaborators for the research development and commercialization of our current or future product candidates. The collaboration with Alloy and any other collaboration agreements we enter into will likely limit our control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of any product candidates we may seek to develop with them. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements. We cannot predict the success of any collaboration in which we have entered or may enter.

We may in the future form or seek strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business.

In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process for these sorts of transactions is time-consuming, complex and expensive. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety, potency, purity and efficacy and obtain marketing approval. Additionally, our existing partners may decide to acquire or partner with other companies developing oncology therapeutics, which may have an adverse impact on our business prospects, financial condition and results of operations.

As a result, if we enter into additional collaboration agreements and strategic partnerships or license our product candidates, we may not be able to realize the benefit of those transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business prospects, financial condition and results of operations. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income

that justifies the entry into the transaction in the first place. Any delays in entering into new collaborations or strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

We rely on third-parties to manufacture our product candidates. Any failure by a third-party manufacturer to produce acceptable raw materials or product candidates for us or to obtain authorization from the FDA or comparable foreign regulatory authorities may delay or impair our ability to initiate or complete our clinical trials, obtain regulatory licensure or approvals or commercialize approved products.

We rely on third-party contract manufacturers to manufacture our preclinical trial product supplies and we expect to continue to do so in the future in relation to our clinical product supplies, and if we receive authorization to market our product candidates, for commercial supplies. We do not own or operate manufacturing facilities for producing such supplies. There can be no assurance that our preclinical and clinical development product supplies will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices. In particular, any replacement of our manufacturer could require significant effort and expertise because there may be a limited number of qualified replacements.

The manufacturing process for a product candidate is subject to FDA and foreign regulatory authority review. 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 cGMPs. In the event that any of our manufacturers fail to comply with such requirements or to perform its obligations to us 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 manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third party, which we may not be able to do on reasonable terms, if at all. In some cases, the technical skills or technology required to manufacture our product candidates may be unique or proprietary to the original manufacturer and we may have difficulty transferring such skills or technology to another third party and a feasible alternative may not exist. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third party manufacture our product candidates. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

We expect to continue to rely on third-party manufacturers if we receive regulatory licensure 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. If we are unable to obtain or maintain third-party manufacturing for product candidates, or to do so on commercially reasonable terms, we may not be able to develop and commercialize our product candidates successfully. Our or a third party's failure to execute on our manufacturing requirements and comply with cGMP or similar foreign requirements 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 licenses, for product candidates;
- loss of the cooperation of an existing or future collaborators;
- subjecting third-party manufacturing facilities or our manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease distribution or to recall batches of our product candidates; and

- the inability to commercialize a product candidate, and an inability to meet commercial demands for such products.

We may be unable to establish agreements with CMOs or to do so on acceptable terms. Even if we are able to establish agreements with CMOs, reliance on them entails additional risks, including:

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

We have only limited technology transfer agreements in place with respect to our product candidates, and these arrangements do not extend to commercial supply and, in some instances, to clinical supply. We acquire many key materials on a purchase order basis. As a result, we do not have long-term committed arrangements with respect to our product candidates and other materials. If we receive marketing licensure for any of our product candidates, we will need to establish an agreement for commercial manufacture with a third party.

The CMOs we retain may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. Our failure, or the failure of our CMOs, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of license, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products.

The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA or the European Union Member States in coordination with the EMA pursuant to inspections that will be conducted after we submit our BLA to the FDA or our marketing authorization application to the EMA. We do not have complete control over all aspects of the manufacturing process of, and are dependent on, our contract manufacturing partners for compliance with cGMP regulations for manufacturing. Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable foreign regulatory bodies, they will not be able to secure and/or maintain marketing licensure for their manufacturing facilities. In addition, we do not have complete control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, European Union Member States and the EMA or other comparable regulatory authorities does not approve these facilities for the manufacture of our product candidates or if it withdraws any such licensure in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain marketing licensure for or market our product candidates, if approved or licensed.

Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of licensure, license revocation, seizures or recalls of products or product candidate, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates and harm our business and results of operations. Our product candidates and any products that we may develop may compete with other product candidates and products for access to suitable manufacturing facilities. As a result, we may not obtain access to these facilities on a priority basis or at all. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing licensure. We do not currently have arrangements in place for redundant supply or a second source for bulk drug substance. If our current CMOs cannot perform as agreed, we may be required to replace such manufacturers. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement manufacturer or be able to reach agreement with any alternative manufacturer.

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

Our CMOs may be unable to successfully scale-up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing approved products, if any.

In order to conduct clinical trials of our product candidates, we will need to manufacture them in large quantities. Quality issues may arise during scale-up activities. Our reliance on a limited number of CMOs, the complexity of drug manufacturing and the difficulty of scaling up a manufacturing process could cause the delay of clinical trials, regulatory submissions, required licensure, or commercialization of our product candidates, cause us to incur higher costs and prevent us from commercializing our product candidates successfully. Furthermore, if our CMOs fail to deliver the required commercial quality and quantities of materials on a timely basis and at commercially reasonable prices, and we are unable to secure one or more replacement CMOs capable of production in a timely manner at a substantially equivalent cost, then testing and clinical trials of that product candidate may be delayed or infeasible, and regulatory licensure or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

Some of our suppliers may experience disruption to their respective supply chain due to the effects of the COVID-19 pandemic, which could delay, prevent or impair our development or commercialization efforts.

We obtain certain chemical or biological intermediates in the synthesis of our product candidates in countries affected by the COVID-19 pandemic. If we are unable to obtain these chemical or biological intermediates in sufficient quantity and in a timely manner, the development, testing and clinical trials of that product candidate may be delayed or infeasible, and regulatory licensure or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

If we are unable to obtain sufficient raw and intermediate materials on a timely basis or if we experience other manufacturing or supply difficulties, our business may be adversely affected.

The manufacture of certain of our product candidates requires the timely delivery of sufficient amounts of raw and intermediate materials. We work closely with our suppliers to ensure the continuity of supply but cannot guarantee these efforts will always be successful. Further, while efforts are made to diversify our sources of raw and intermediate materials, in certain instances we acquire raw and intermediate materials from a sole supplier. While we believe that alternative sources of supply exist where we rely on sole supplier relationships, there can be no assurance that we will be able to quickly establish additional or replacement sources for some materials. A reduction or interruption in supply, and an inability to develop alternative sources for such supply, could adversely affect our ability to manufacture our product candidates in a timely or cost-effective manner.

We expect to rely on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for completing such trials.

We will rely on third-party clinical research organizations, or CROs, to conduct clinical trials for our biological product candidates. We currently do not plan to conduct any clinical trials independently. Agreements with these CROs might terminate for a variety of reasons, including for their failure to perform. Entry into alternative arrangements, if necessary, could significantly delay our product development activities.

Our reliance on these CROs for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols in the applicable IND. Moreover, the FDA requires compliance with standards, commonly referred to as GCPs for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected.

If these CROs 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 licenses for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain patent protection for our product candidates, or if the scope of the patent protection obtained is not sufficiently broad, or if our patents are insufficient to protect our product candidates for an adequate amount of time, or if we are unable to obtain adequate protection for our proprietary know-how we may not be able to compete effectively in our markets.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our product candidates and discovery programs. Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our current and any future product candidates. We seek to protect our proprietary position by, among other methods, licensing and filing patent applications in the United States and abroad related to our current and future product candidates and discovery programs. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position.

We in-license and file patent applications directed to our product candidates in an effort to establish intellectual property positions directed to their compositions of matter as well as uses of these product candidates in the treatment of diseases. Our intellectual property includes patents and patent applications that we own, as well as patents and patent applications that we in-license. For example, our license agreements with Pfizer and LegoChem grant us exclusive rights to certain patents and patent applications relating to our product candidates.

We or our licensors have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our product candidates in every country or territory in which we may sell our products, if approved. In addition, we cannot be sure that any of our pending patent applications will issue or that, if issued, they have or will issue in a form that will be advantageous to us. The United States Patent and Trademark Office, or the USPTO, international patent offices or judicial bodies may deny or significantly narrow claims made under our patent applications and our issued patents may be successfully challenged, may be designed around, or may otherwise be of insufficient scope to provide us with protection for our commercial products.

It is possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO may be significantly narrowed by the time they issue, or claims may not issue at all. The claims of our issued patents or patent applications when issued may not cover our current or future product candidates, or even if such patents provide coverage, the coverage obtained may not provide any competitive advantage. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our current or any future product candidates in the United States or in other foreign countries. There is no assurance that all of the potentially relevant prior art relating to our patents

and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue and even if such patents cover our current or any future product candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any product candidates that we may develop. Further, if we encounter delays in regulatory licensure or approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

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

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. Furthermore, other parties may have developed or may develop technologies that may be related to, or competitive with, our technologies, and such parties may have filed, or may file, patent applications, or may have received, or may receive, patents, claiming inventions that may overlap or conflict with those claimed in our patent applications or issued patents, and that we may rely upon to establish exclusivity for our products in the market. 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 know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or drugs, in whole or in part, or which effectively prevent others from commercializing competitive technologies and drugs. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

We may be subject to a third party submission of prior art to the USPTO, or other patent offices, in our pending patent applications. Such a submission may preclude the granting of any of our pending patent applications, or may result in patents granting with narrow claims, which could limit our ability to stop others from using or commercializing similar or identical technology and products. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patent rights may be challenged in the courts or patent offices in the United States and abroad. For example, we may become involved in opposition, derivation, reexamination, inter partes review, post-grant review, or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such proceeding, or in litigation, could reduce the scope of our patent claims, result in our patent rights being held invalid, in whole or in part, or unenforceable, or limit the duration of the patent protection of our technology and products, and allow third parties to commercialize our technology or products and compete directly with us without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize our current or any future product candidates.

Moreover, patents have a limited lifespan. In the United States, a patent generally expires 20 years after the earliest filing date of a non-provisional patent application. Various extensions may be available; however, the life

of a patent, and the protection it affords, is limited. Without patent protection for our current or any future product candidates, we may be open to competition from generic and/or biosimilar versions of such products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent rights may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Even if our patent rights are unchallenged, our issued patents and our pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our owned patent rights by developing similar or alternative technologies or products in a non-infringing manner. For example, a third-party may develop a competitive product that provides benefits similar to one or more of our product candidates, but that has a different composition that falls outside the scope of our patent protection. If the protection provided by our patent rights with respect to our product candidates is not sufficiently broad to impede such competition, or if the breadth, strength or term (including any extensions or adjustments) of protection provided by our patent rights with respect to our product candidates or any future product candidates is successfully challenged, our ability to successfully commercialize our product candidates could be negatively affected, which would harm our business. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates or any future product candidates under patent protection would be reduced.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or patent applications will have to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned and licensed patents and/or applications and any patent rights we may own or license in the future. We rely on our service providers or our licensors to pay these fees. The USPTO and various non-U.S. government patent agencies require compliance with several 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 we are also dependent on our licensors to take the necessary action to comply with these requirements with respect to our licensed intellectual property. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our products or technologies, we may not be able to stop a competitor from marketing products that are the same as, or similar to, our product candidates, which would have a material adverse effect on our business. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market and this circumstance could harm our business.

In addition, if we fail to apply for applicable patent term extensions or adjustments, we will have a more limited time during which we can enforce our granted patent rights. In addition, if we are responsible for patent prosecution and maintenance of patent rights in-licensed to us, any of the foregoing could expose us to liability to the applicable patent owner.

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

Given the amount of time required for the development, testing and regulatory review of new product candidates such as PYX-201, PYX-202, and PYX-203, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we have or will obtain patent rights. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, provided that the patent is not enforceable for more than 14 years from the date of licensure, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their drug earlier than might otherwise be the case.

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

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

- others may be able to make compounds or formulations that are similar to our product candidates but that are not covered by the claims of any patents, should they issue, that we own or license;
- we or our licensors might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or license;
- we or our licensors might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or license may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive drugs for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

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

Our commercial success depends, in part, upon our ability and the ability of others with whom we may collaborate to develop, manufacture, market and sell our current and any future product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The

biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our current and any future product candidates and technology, including interference proceedings, post grant review and inter partes review before the USPTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, which could have a negative impact on our ability to commercialize our current and any future product candidates. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Moreover, given the vast number of patents in our field of technology, we cannot be certain that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Other companies and research institutions have filed, and may file in the future, patent applications related to antibody-drug conjugates and their therapeutic use. Some of these patent applications have already been allowed or issued, and others may issue in the future. While we may decide to initiate proceedings to challenge the validity of these or other patents in the future, we may be unsuccessful, and courts or patent offices in the United States and abroad could uphold the validity of any such patent. Furthermore, because patent applications can take many years to issue and may be confidential for 18 months or more after filing, and because pending patent claims can be revised before issuance, there may be applications now pending which may later result in issued patents that may be infringed by the manufacture, use or sale of our product candidates. Regardless of when filed, we may fail to identify relevant third party patents or patent applications, or we may incorrectly conclude that a third party patent is invalid or not infringed by our product candidates or activities. If a patent holder believes our product candidate infringes its patent, the patent holder may sue us even if we have received patent protection for our technology. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant drug revenue and against whom our own patent portfolio may thus have no deterrent effect. If a patent infringement suit were threatened or brought against us, we could be forced to stop or delay research, development, manufacturing or sales of the therapeutic or product candidate that is the subject of the actual or threatened suit.

If we are found to infringe a third party's valid and enforceable intellectual property rights, we could be required to obtain a license from such third party to continue developing, manufacturing and marketing our product candidate(s) and technology. Under any such license, we would most likely be required to pay various types of fees, milestones, royalties or other amounts. Moreover, we may not be able to obtain any required license on commercially reasonable terms or at all.

The licensing or acquisition of third-party intellectual property rights is a competitive area, and more established companies may also pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate(s), which could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product candidate. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other

intellectual property right. We may be required to indemnify collaborators or contractors against such claims. A finding of infringement could prevent us from manufacturing and commercializing our current or any future product candidates or force us to cease some or all of our business operations, which could materially harm our business. Even if we are successful in defending against such claims, litigation can be expensive and time consuming and would divert management's attention from our core business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

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

Certain of our employees, consultants or advisors are currently, or were previously, employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own, and we cannot be certain that our agreements with such parties will be upheld in the face of a potential challenge or that they will not be breached, for which we may not have an adequate remedy. The assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. If we breach our University of Chicago, Pfizer, or LegoChem license agreements or any of the other agreements under which we acquired, or will acquire, intellectual property rights covering our product candidates, we could lose the ability to continue the development and commercialization of the related product.

The licensing of intellectual property is of critical importance to our business and to our current and future product candidates, and we expect to enter into additional such agreements in the future.

In particular, the rights to the intellectual property covering our product candidates PYX-201 and PYX-203 are in-licensed from Pfizer and the rights to the intellectual property covering our product candidate PYX-202 is in-licensed from LegoChem. We may acquire the rights to the intellectual property covering future product candidates from other third party licensors.

If we fail to meet our obligations under any of our in-license agreements, including the Pfizer License Agreement or the LegoChem License Agreement, then the licensor may terminate the license agreement. If one of our material in-license agreements is terminated, we will lose the right to continue to develop and commercialize the product candidate(s) covered by such in-license agreement. While we would expect to exercise all rights and remedies available to us, including seeking to cure any breach by us, and otherwise seek to

preserve our rights under our in-license agreements, we may not be able to do so in a timely manner, at an acceptable cost or at all.

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

Competitors may infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive and time consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our owned or licensed patents at risk of being invalidated or interpreted narrowly and could put our owned or licensed patent applications at risk of not issuing. The initiation of a claim against a third party might also cause the third party to bring counter claims against us, such as claims asserting that our patent rights are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, inter partes review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is or will be no invalidating prior art, of which we and the patent examiner were unaware during prosecution. For the patents and patent applications that we have licensed, we may have limited or no right to participate in the defense of any licensed patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates. Such a loss of patent protection could harm our business.

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

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

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.

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

The United States has recently enacted and implemented wide ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce patents that we own, have licensed or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions, changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we own or have licensed or that we may obtain in the future.

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

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

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.

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

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets. Despite our efforts to protect our trade secrets, we may not be able to prevent the unauthorized disclosure or use of our technical know-how or other trade secrets by the parties to these agreements. Moreover, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our confidential information or proprietary technology and processes. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the

collaborators, scientific advisors, employees, contractors and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a result. Moreover, if confidential information that is licensed or disclosed to us by our partners, collaborators, or others is inadvertently disclosed or subject to a breach or violation, we may be exposed to liability to the owner of that confidential information. Enforcing a claim that a third-party illegally or unlawfully obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets.

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

We expect to rely on trademarks as one means to distinguish any of our product candidates that are approved for marketing from the products of our competitors. We have not yet selected trademarks for our product candidates and have not yet begun the process of applying to register trademarks for our current or any future product candidate. Once we select trademarks and apply to register them, our trademark applications may not be approved. Third parties may oppose our trademark applications or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks, and we may not have adequate resources to enforce our trademarks.

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

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

In addition to seeking patent and trademark protection for our product candidates, we may also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees, advisors and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for any such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets.

Moreover, our competitors may independently develop knowledge, methods and know-how equivalent to our trade secrets. Competitors could purchase our products and replicate some or all of the competitive advantages we derive from our development efforts for technologies on which we do not have patent protection. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, 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.

We also seek to preserve the integrity and confidentiality of our data and other confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and detecting the disclosure or misappropriation of confidential information and enforcing a claim that a party illegally disclosed or misappropriated confidential information is difficult, expensive and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach. In addition, our confidential information may otherwise become known or be independently discovered by competitors, in which case we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us.

Risks Related to Our Common Stock and this Offering

Our 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 annual and quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- results of preclinical studies, IND submissions, clinical trials, or the addition or termination of clinical trials or funding support by us, or existing or future collaborators or licensing partners;
- variations in the level of expense related to the ongoing development of the FACT platform, our product candidates or future development programs;
- 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 our product candidates receives regulatory licensure, the terms of such licensure and market acceptance and demand for such product candidates;
- regulatory developments affecting our product candidates or those of our competitors; and
- changes in general market and economic conditions.

If our operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially.

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

Our stock price is likely to be highly volatile. 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 section of the prospectus titled “Risk Factors” and the following:

- results of our preclinical studies, IND submissions and clinical trials, if any, of our product candidates, or those of our competitors or our existing or future collaborators;
- regulatory or legal developments in the U.S. and other countries, especially changes in laws or regulations applicable to our products;
- the success of competitive products or technologies;
- introductions and announcements of new products by us, our future commercialization partners, or our competitors, and the timing of these introductions or announcements;
- actions taken by regulatory agencies with respect to our products, preclinical studies, clinical trials, 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, products or product candidates;
- developments concerning any future collaborations, including but not limited to those with our sources of manufacturing supply and our commercialization partners;
- 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 our products;
- our ability or inability to raise additional capital and the terms on which we raise it;
- the recruitment or departure of key personnel;
- changes in the structure of healthcare payment systems;
- actual or anticipated changes in earnings estimates 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;
- trading volume of our common stock;
- sales of our common stock by us, our insiders or our other stockholders;
- expiration of market stand-off or lock-up agreements;
- the concentrated ownership of our common stock;
- changes in accounting principles;
- terrorist acts, acts of war or periods of widespread civil unrest;
- the impact of any natural disasters or public health emergencies, such as the COVID-19 pandemic, and other calamities; and
- general economic, industry and market conditions.

In addition, the stock markets in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme volatility that has been often unrelated 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 operating performance.

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

The assumed initial public offering price is substantially higher than the net tangible book value per share of our outstanding common stock immediately following the completion of this offering. Based on the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, if you purchase shares of common stock in this offering, you will experience substantial and immediate dilution in the pro forma as adjusted net tangible book value per share of $ as of , 2021. That is because the price that you pay will be substantially greater than the pro forma net tangible book value per share of the common stock that you acquire. This dilution is due in large part to the fact that our earlier investors paid substantially less than the assumed initial public offering price when they purchased their shares of our capital stock. You will experience additional dilution when those holding stock options or warrants exercise their right to purchase common stock under our equity incentive plans or when we otherwise issue additional shares of common stock. See “Dilution.”

The future issuance of equity or of debt securities that are convertible into equity will dilute our share capital.

We will need to raise additional capital in the future. To the extent we raise additional capital through the issuance of equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders’ rights. Future issuances of our common stock or other equity securities, or the perception that such sales may occur, could adversely affect the trading price of our common stock and impair our ability to raise capital through future offerings of shares or equity securities. We may choose to raise additional capital through the issuance of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. No prediction can be made as to the effect, if any, that future sales of common stock or the availability of common stock for future sales will have on the trading price of our common stock.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters. Although we have applied to list our common stock on Nasdaq, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all.

Because our management will have flexibility in allocating the net proceeds from this offering, you may not agree with how we use them and the proceeds may not be invested successfully.

We intend to use the net proceeds of the offering for development and regulatory activities relating to our product candidates, discovery programs, working capital and other general corporate purposes, and therefore, our management will have flexibility in allocating the offering proceeds. See “Use of Proceeds.” Accordingly, you will be relying on the judgment of our management with regard to the allocation of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being allocated appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for our company.

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

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us, our business or our market. 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 stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue adverse or misleading research or reports regarding us, our business model, our intellectual property, our stock performance or our market, or if our operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval and their interests may conflict with your interests as an owner of our common stock.

Based on the beneficial ownership of our common stock as of , 2021, after this offering, our executive officers and directors, together with holders of five percent or more of our outstanding common stock before this offering and their respective affiliates, will beneficially own approximately percent of our outstanding common stock (assuming no exercise of the underwriters' option to purchase additional shares of common stock). As a result, these stockholders, if acting together, will continue to have significant influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets and any other significant corporate transaction. 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.

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

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the nonaffiliate 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.

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

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

Upon the completion of this offering, shares of common stock will be outstanding (shares if the underwriters exercise their option to purchase additional shares from us in full), based on the number of shares outstanding as of , 2021.

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

Upon the completion of this offering, the holders of approximately shares of common stock, or % of our outstanding shares following this offering, will have rights, subject to certain conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or our other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and shares that may be issued under our equity incentive plans, these shares will be able to be sold in the public market upon issuance, subject to applicable securities laws and the lock-up agreements described under "Underwriting."

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

We are an "emerging growth company," as defined in the JOBS Act. We will remain an emerging growth company until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeded $700.0 million as of the prior June 30th and (ii) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

An emerging growth company may take advantage of specified reduced reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- being permitted to present only two years of audited financial statements and only two years of related management's discussion and analysis of financial condition and results of operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act;
- an exemption from compliance with any new requirements adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotations;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirement to hold a nonbinding advisory vote on executive compensation and to obtain stockholder approval of any golden parachute payments not previously approved.

We have elected to take advantage of certain of the reduced disclosure obligations 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 investors may be different from the information you might receive from other public reporting companies that are not emerging growth 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 applicable to public companies until those standards would otherwise apply to private companies. We have elected to take advantage of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either irrevocably elect to "opt out" of such extended transition period or no longer qualify as an emerging growth company. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies.

We are also a "smaller reporting company," meaning that the market value of our shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700 million. 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 have reduced disclosure obligations regarding executive compensation, and, similar to emerging growth companies, if we are a smaller reporting company with less than $100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

Anti-takeover provisions in our charter documents to be in effect upon the completion of this offering and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in the amended and restated certificate of incorporation and our amended and restated bylaws to be in effect upon the completion of this offering may delay or prevent an acquisition of us or a change in our management. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

- a prohibition on actions by our stockholders by written consent;
- a requirement that special meetings of stockholders be called only by the chairman of our board of directors, our chief executive officer, or our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;
- advance notice requirements for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings;
- a requirement that directors may only be removed "for cause" and only with 66 2/3% voting stock of our stockholders;
- a requirement that only the board of directors may change the number of directors and fill vacancies on the board;

- division of our board of directors into three classes, serving staggered terms of three years each; and
- the authority of the board of directors to issue preferred stock with such terms as the board of directors may determine.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, as amended, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions would apply even if the proposed merger or acquisition could be considered beneficial by some stockholders.

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. Additionally, if we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

As a public company, and particularly after we are no longer an emerging growth company or a 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. Also the Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors or our board committees or as executive officers. However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

In addition, as a public company, we will be required to incur additional costs and obligations in order to comply with SEC rules that implement Section 404 of the Sarbanes-Oxley Act. Under these rules, beginning with our second annual report on Form 10-K after we become a public company, we will be required to make a formal assessment of the effectiveness of our internal control over financial reporting, and once we cease to be an emerging growth company or a smaller reporting company with less than $100 million in annual revenue, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaging 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 our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively, and implement a continuous reporting and improvement process for 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 meet

the detailed standards under the rules. During the course of its testing, our management may identify material weaknesses or deficiencies which may not be remedied in time to meet the deadline imposed by the Sarbanes-Oxley Act. Our internal control over financial reporting will not prevent or detect all errors and all fraud.

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

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

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, your ability to achieve a return on your investment will depend on appreciation of the value of our common stock.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to any appreciation in the value of our common stock, which is not certain.

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

In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Regardless of the merits or the ultimate results of such litigation, securities litigation brought against us could result in substantial costs and divert our management's attention from other business concerns.

Our certificate of incorporation and bylaws to be effective upon the completion of this offering designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation to be effective upon the completion of this offering provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal

district court for the District of Delaware) shall be the sole and exclusive forum for the following types of proceedings: (i) any derivative action or proceeding brought on behalf of our company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders to our company or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the General Corporation Law of the State of Delaware or as to which the General Corporation Law of the State of Delaware confers jurisdiction on the Court of Chancery of the State of Delaware or (iv) any action asserting a claim arising pursuant to any provision of our amended and restated certificate of incorporation or amended and restated bylaws (in each case, as they may be amended from time to time) or governed by the internal affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. Our amended and restated bylaws further provide that the federal district courts of the United States of America will be the exclusive forum to the fullest extent permitted by law, for resolving any complaint asserting a cause of action arising under the Securities Act. 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 our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation and amended and restated bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our amended and restated certificate of incorporation and amended and restated bylaws described above.

Our ability to use net operating loss carryforwards and other tax attributes may be limited in connection with this offering or other ownership changes.

We have incurred substantial losses during our history, do not expect to become profitable in the near future and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, subject to certain limitations (including the limitations described below) until such unused losses expire (if at all). At December 31, 2020, we had federal and state net operating loss ("NOL") carryforwards of approximately $13.2 million and $12.5 million, respectively. The federal NOL carryforwards are not subject to expiration. The state NOL carryforwards expire at various dates beginning in 2039. In addition, as of December 31, 2020, we had $0.1 million and $0.1 million of federal and state research and development credit carryforwards, respectively, which begin to expire in 2039.

Our NOL and credit carryforwards are subject to review and possible adjustment by the IRS, and state tax authorities. Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, our federal NOL and credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership of our company. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Our ability to utilize our NOL carryforwards and other tax attributes to offset future taxable income or tax liabilities may be limited as a result of ownership changes, including potential changes in connection with this offering. Similar rules may apply under state tax laws. We have not yet determined the amount of the cumulative change in our ownership resulting from this offering or other transactions, or any resulting limitations on our ability to utilize our NOL carryforwards and other tax attributes. In addition, we may experience ownership changes in the future due to subsequent shifts in our stock, some of which are outside of our control. If we earn taxable income, such limitations could result in increased future income tax liability to us and our future cash flows could be adversely affected. We have recorded a full valuation allowance related to our NOL carryforwards and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical fact contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “would,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled “Risk Factors” and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations include:

- our ability to develop and advance our current product candidates and programs, and to successfully initiate and complete clinical trials;
- the ability of our clinical trials to demonstrate the safety, purity and potency of our product candidates and other positive results;
- the size of the market opportunity for our product candidates, including our estimates of the number of patients who suffer from the cancers we are targeting;
- our manufacturing, commercialization and marketing capabilities and strategy;
- our plans to further develop the FACT platform and expand our pipeline of product candidates;
- the impact of the COVID-19 pandemic on our business, financial condition, results of operations, and prospects;
- the timing or likelihood of regulatory filings and approvals for our product candidates;
- regulatory developments in the United States and Europe and other foreign countries;
- our expectations and plans to obtain funding for our operations, including from our existing and potential future collaboration and licensing agreements;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates;
- our continued reliance on third parties to manufacture our product candidates for preclinical studies, and, in the future, to conduct clinical trials and manufacture product candidates for such clinical trials;
- our anticipated use of proceeds from this offering; and
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

In addition, statements such as “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, although 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 a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $ million, based on an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters' option to purchase additional shares from us is exercised in full, we estimate that our net proceeds will be approximately $ million.

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds from this offering by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1 million share increase (decrease) in the number of shares offered by us would increase (decrease) the net proceeds from this offering by $, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial public offering price or the number of shares by these amounts would have a material effect on our uses of the proceeds from this offering, although it may accelerate the time when we need to seek additional capital.

We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents for the following:

- approximately $ to advance PYX-201 through IND-enabling studies and, assuming success of those studies and subject to FDA review of an IND submission, to initiate Phase 1 trial with this program;
- approximately $ to advance PYX-202 through IND-enabling studies and, assuming success of those studies and subject to FDA review of an IND submission, to initiate Phase 1 trial with this program;
- approximately $ to advance PYX-203 through IND-enabling studies and, assuming success of those studies and subject to FDA review of an IND submission, to initiate Phase 1 trial with this program;
- approximately $ for continued advancement of our IO discovery programs;
- approximately $ for business development activities, including in-licensed programs, the identification and advancement of additional programs and development candidates, and to acquire, or invest in additional businesses, technologies, products or assets, although currently we have no specific agreements, commitments or understandings in this regard; and
- the remaining proceeds for the continued advancement of our pipeline, milestones for previously in-licensed programs, hiring of additional personnel, costs of operating as a public company, and other general corporate purposes.

Based on our planned use of the net proceeds from this offering and our current cash and cash equivalents, we estimate that such funds will enable us to fund our operating expenses and capital expenditure requirements through . We have based this estimate on assumptions that may prove to be incorrect, and we could use our available capital resources sooner than we currently expect.

This expected use of the net proceeds from this offering represents our current intentions based upon our present plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. Our existing cash as of the date of this prospectus, together with the estimated net proceeds from this offering, will not be sufficient to fund development of our product candidates through regulatory approval and commercialization, and we will need to raise substantial additional capital to complete the

development and commercialization of our product candidates. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the time and cost necessary to conduct our ongoing and planned preclinical studies and planned clinical trials, the results of such studies and trials, as well as any collaborations that we may enter into with third parties for our product candidates, and the amount of cash used in our operations and any unforeseen cash needs as well as other factors described in the section of this prospectus titled “Risk Factors”. We may find it necessary or advisable to use the net proceeds for other purposes. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending the use of the proceeds from this offering, we may invest the proceeds in interest-bearing, investment-grade securities, certificates of deposit and/or U.S. government securities.

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future. Any future determination to declare and pay cash dividends, if any, will be made at the discretion of our board of directors and will depend on a variety of factors, including applicable laws, our financial condition, results of operations, contractual restrictions, capital requirements, business prospects, general business or financial market conditions and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of June 30, 2021:

- on an actual basis;
- on a pro forma basis to give effect to (i) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 127,537,173 shares of our common stock upon the closing of this offering and (ii) the filing and effectiveness of our restated certificate of incorporation immediately prior to the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to (i) our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (ii) the milestone payment of $9.6 million in the fourth quarter of 2021 to LegoChem.

You should read the information in this table together with our consolidated financial statements and the related notes appearing elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus.

	As of June 30, 2021		
(in thousands, except share and per share data)	**Actual**	**Pro Forma**	**Pro Forma As Adjusted**
Cash and cash equivalents	$142,473	$ 142,473	$
Series A convertible preferred stock, $0.001 par value; 22,724,926 shares authorized, 22,724,925 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	$ 21,942	$ —	$
Series B convertible preferred stock, $0.001 par value; 104,812,248 shares authorized, 104,812,248 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	172,081	—	
Stockholders' equity (deficit):			
Preferred stock, $0.001 par value; no shares authorized, issued or outstanding, actual; shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	
Common stock, $0.001 par value; 40,300,000 shares authorized, 13,849,687 shares issued and 9,659,485 shares outstanding, actual; shares authorized, pro forma and pro forma as adjusted; shares issued and outstanding, pro forma; shares issued and outstanding, pro forma as adjusted	10	141	
Additional paid-in capital	3,116	197,008	
Accumulated deficit	(60,714)	(60,714)	
Total stockholders' (deficit) equity	(57,588)	136,435	
Total capitalization	$136,435	$ 136,435	$

The pro forma as adjusted information above is illustrative only, and our capitalization following the closing of this offering will depend on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro

forma as adjusted amount of each of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The table above excludes:

- 17,537,516 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2021 under our 2019 Plan, at a weighted average exercise price of $0.78 per share;
- shares of our common stock issuable upon the exercise of stock options granted after June 30, 2021 under our 2019 Plan, at a weighted average exercise price of $ per share;
- 5,018,612 shares of common stock available for future issuance as of June 30, 2021 under our 2019 Plan; and
- and additional shares of common stock that will become available for issuance under our 2021 Plan and our 2021 ESPP, respectively, each of which will become effective immediately prior to the effectiveness of the registration statement of which this prospectus is a part, as well as any automatic increases in the number of shares of common stock reserved for future issuance under our 2021 Plan and 2021 ESPP.

DILUTION

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

Our historical net tangible book value (deficit) as of June 30, 2021 was $(57.6) million, or $(4.16) per share of common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets (total assets less intangible assets) less our total liabilities and convertible preferred stock. Historical net tangible book value (deficit) per share represents historical net tangible book value (deficit) divided by 13,849,687 shares of our common stock, which includes 4,190,202 shares of our non-vested restricted common stock as of June 30, 2021.

Our pro forma net tangible book value as of June 30, 2021 was $136.4 million, or $0.96 per share of common stock. Pro forma net tangible book value represents the amount of our total tangible assets (total assets less intangible assets) less our total liabilities, after giving effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 127,537,173 shares of our common stock upon the closing of this offering. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of June 30, 2021, after giving effect to such automatic conversion.

After giving further effect to our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and after the milestone payment of $9.6 million in the fourth quarter of 2021 to LegoChem, our pro forma as adjusted net tangible book value as of June 30, 2021 would have been $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution of $ in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Historical net tangible book value (deficit) per share as of June 30, 2021	$(4.16)	
Increase in net tangible book value per share attributable to the automatic conversion of preferred stock	5.12	
Pro forma net tangible book value per share as of June 30, 2021	0.96	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing common stock in this offering		
Pro forma as adjusted net tangible book value per share immediately after this offering		
Dilution per share to new investors purchasing common stock in this offering		$

The dilution information discussed above is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by $ and dilution per share to new investors purchasing common stock in this offering by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase of 1,000,000 shares in the number of shares offered by us, as set forth on the

cover page of this prospectus, would increase our pro forma as adjusted net tangible book value per share after this offering by $ and decrease the dilution per share to new investors purchasing common stock in this offering by $, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease our pro forma as adjusted net tangible book value per share after this offering by $ and increase the dilution per share to new investors purchasing common stock in this offering by $, assuming no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full, our pro forma as adjusted net tangible book value per share after this offering would be $, representing an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution in pro forma as adjusted net tangible book value per share of $ to new investors purchasing common stock in this offering, assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of June 30, 2021 on a pro forma as adjusted basis, the total number of shares of common stock purchased from us on an as converted to common stock basis, the total consideration paid or to be paid and the average price per share paid or to be paid by existing stockholders and by new investors in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price
	Number	Percentage	Amount	Percentage	Per Share
Existing stockholders		%	$	%	$
Investors participating in this offering					$
Total		100%	$	100%	

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

The tables and discussion above are based on 13,849,687 shares of common stock outstanding as of June 30, 2021, and excludes:

- 17,537,516 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2021 under our 2019 Plan, at a weighted average exercise price of $0.78 per share;
- shares of our common stock issuable upon the exercise of stock options granted after June 30, 2021 under our 2019 Plan, at a weighted average exercise price of $ per share;
- 5,018,612 shares of common stock available for future issuance as of June 30, 2021 under our 2019 Plan; and

- and additional shares of common stock that will become available for issuance under our 2021 Plan and our 2021 ESPP, respectively, each of which will become effective immediately prior to the effectiveness of the registration statement of which this prospectus is a part, as well as any automatic increases in the number of shares of common stock reserved for future issuance under our 2021 Plan and 2021 ESPP.

To the extent that outstanding stock options are exercised, new stock options or warrants are issued, or we issue additional shares of common stock in the future, there will be further dilution to our stockholders, including investors purchasing common stock in this offering. 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, including investors purchasing shares of common stock in this offering.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes appearing 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. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a preclinical oncology company focused on developing an arsenal of next-generation therapeutics to target difficult-to-treat cancers and improve quality of life for patients. We develop our product candidates with the objective to directly kill tumor cells, and to address the underlying pathologies created by cancer that enable its uncontrollable proliferation and immune evasion. Since our launch in 2019, we have developed a broad portfolio of novel antibody drug conjugate, or ADC, product candidates and monoclonal antibody, or mAb, preclinical discovery programs that we are developing as monotherapies and in combination with other therapies.

Since our inception, we have focused substantially all our resources on organizing and staffing our company, business planning, raising capital, conducting research and development activities, filing and prosecuting patent applications, identifying potential product candidates and undertaking preclinical studies and a clinical trial. We do not have any products approved for sale and have not generated any revenue from product sales or from any other sources. To date, we have funded our operations with proceeds from sales of convertible preferred stock. Through June 30, 2021, we had received gross proceeds of $174.0 million, excluding $20.5 million associated with the license agreements, from sales of our convertible preferred stock. Our ability to generate any product revenue, and in particular to generate product revenue sufficient to achieve profitability, will depend on the successful development and eventual commercialization of one or more of our product candidates.

Since our inception, we have incurred significant operating losses. We reported net losses of $2.8 million and $12.8 million for the years ended December 31, 2019 and 2020, and $5.1 million and $45.0 million for the six months ended June 30, 2020 and 2021, respectively. As of June 30, 2021, we had an accumulated deficit of $60.7 million. We expect to continue to incur significant expenses and operating losses for the foreseeable future. We expect that our expenses and capital expenditures will increase substantially in connection with our ongoing activities, particularly if and as we:

- manufacture product candidates, conduct IND enabling studies and submit INDs and initiate Phase 1 clinical trials for our ADC product candidates, PYX-201, PYX-202 and PYX-203;
- select antibody programs to take into development including manufacture product candidates, conduct IND enabling studies and submit INDs and initiate Phase 1 clinical trials;
- initiate, conduct and successfully complete later-stage clinical trials;
- scale up external manufacturing capabilities for later stage trials and to commercialize our products;
- seek marketing licenses for any product candidates that successfully complete clinical trials;
- ultimately establish a sales, marketing and distribution infrastructure for which we may obtain marketing licensure;
- leverage the FACT platform to identify and then advance additional product candidates into preclinical and clinical development;

- expand, maintain and protect our intellectual property portfolio;
- hire additional clinical, regulatory, scientific, operational, financial and management information personnel; and operate as a public company after this offering.

We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for one or more of our product candidates. If we obtain regulatory approval for any of our product candidates, we expect to incur significant expenses related to developing our commercialization capability to support product sales, marketing and distribution. Further, following the completion of this offering, we expect to incur additional costs associated with operating as a public company.

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 a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements or arrangements as, and when, needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve 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 may be forced to reduce or terminate our operations.

We are monitoring the potential impact of the COVID-19 pandemic on our business and consolidated financial statements. To date, we have not experienced material business disruptions. We are following, and will continue to follow, recommendations from the U.S. Centers for Disease Control and Prevention as well as federal, state and local governments regarding working-from-home practices for non-essential employees. For example, the COVID-19 pandemic in Massachusetts resulted in a temporary reduction in workforce presence at our Cambridge research facility. While we increased workforce presence at our facility in the second quarter of 2020, not all employees have returned to our facility and we cannot be certain that we will not be required to close our facility in the future as a result of the COVID-19 pandemic. We cannot be certain what the overall impact of the COVID-19 pandemic will be on our business, and it has the potential to adversely affect our business.

Components of Our Results of Operations

Operating Expenses

Research and Development Expenses

Research and development expenses consist of costs incurred for our research activities, including our discovery efforts, and the development of our programs. These expenses include:

- employee-related expenses, including salaries, payroll taxes, related benefits and stock-based compensation expense for employees engaged in research and development functions;
- expenses incurred in connection with our product candidates and the development of research programs, including under agreements with third parties, such as consultants, contractors, contract manufacturing organizations, or CMOs, and contract research organizations, or CROs;
- laboratory supplies and research materials; and
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities and insurance.

We expense research and development costs as incurred. Non-refundable advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. The prepaid amounts are expensed as the related goods are delivered or the services are performed, or when it is no longer expected that the goods will be delivered or the services rendered.

Our direct external research and development expenses consist of costs that include fees, reimbursed materials and other costs paid to consultants, contractors, CMOs and CROs in connection with our preclinical and clinical activities. We do not allocate employee costs, costs associated with our discovery efforts, laboratory supplies, and facilities expenses, including depreciation or other indirect costs, to specific product development programs because these costs are deployed across multiple programs and our platform and, as such, are not separately classified.

Product candidates in later stages of clinical development 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. We expect that our research and development expenses will increase substantially in connection with our ongoing and planned preclinical and clinical development activities in the near term and in the future. The successful development of our product candidates is highly uncertain. At this time, we cannot accurately estimate or know the nature, timing and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates and we may never succeed in obtaining regulatory approval for any of our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and personnel-related costs, including stock-based compensation, for our personnel in executive, legal, finance and accounting, human resources and other administrative functions. General and administrative expenses also include legal fees relating to patent and corporate matters; professional fees paid for accounting, auditing, consulting and tax services; insurance costs; travel expenses; and facility costs not otherwise included in research and development expenses.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our programs and platform. We also anticipate that we will incur increased accounting, audit, legal, regulatory, compliance, director and officer insurance, and investor and public relations expenses associated with operating as a public company.

Other Income (Expense)

Interest income consists of interest earned on our invested cash and cash equivalent balances. We expect our interest income will increase as we invest the cash received from the net proceeds from this offering.

The change in fair value of derivative liability represents the increase in the fair value of the derivative liability recorded as a result of an opt-in, investment and additional consideration agreement with LegoChem, or the “Opt-In Agreement.”

Loss from Equity Method Investment in Joint Venture

In March 2021, we entered into definitive transaction agreements with Alloy Therapeutics, Inc. (“Alloy”) to finance and operate the Alloy Pyxis JV, a joint venture company formed in collaboration with Alloy to leverage our technology and Alloy’s ATX-Gx™ platform and antibody discovery services. We account for our investment in the Alloy Pyxis JV under the equity method.

Income Taxes

Since our inception, we have not recognized any income tax benefits for the net losses we have incurred or for the research and development tax credits earned in each year and interim period, as we believe, based upon

the weight of available evidence, that it is more likely than not that all of our net operating loss, or NOL, carryforwards and tax credit carryforwards will not be realized.

As of December 31, 2020, we had federal NOL carryforwards of $13.2 million available to reduce future federal taxable income. The federal NOL carryforwards are not subject to expiration. The Tax Cuts and Jobs Act, or the TCJA, enacted on December 22, 2017, limits a taxpayer's ability to utilize NOL deduction in a year to 80% taxable income for federal NOLs arising in tax years beginning after December 31, 2017. The Coronavirus Aid, Relief, and Economic Security Act, enacted on March 27, 2020, retroactively and temporarily (for taxable years beginning before January 1, 2021) suspends application of the 80%-of-income limitation on the use of NOLs. As of December 31, 2020, we had state NOL carryforwards of $12.5 million available to reduce future state taxable income, which expire at various dates beginning in 2039.

Results of Operations

Comparison of the Six Months Ended June 30, 2020 and 2021

The following table summarizes our results of operations for the six months ended June 30, 2020 and 2021 (in thousands):

	Six Months Ended June 30,		
	2020	**2021**	**Change**
Operating expenses:			
Research and development	$ 3,484	$ 35,979	$ 32,495
General and administrative	1,639	5,691	4,052
Total operating expenses:	5,123	41,670	36,547
Loss from operations	(5,123)	(41,670)	(36,547)
Other income (expense):			
Interest income	65	10	(55)
Service fee income from related party	—	181	181
Change in fair value of derivative liability	—	(3,261)	(3,261)
Total other income (expense)	65	(3,070)	(3,135)
Loss from equity method investment in joint venture	—	(231)	(231)
Net loss and comprehensive loss	$ (5,058)	$ (44,971)	$ (39,913)

Research and Development Expenses

The following table summarizes our research and development expenses for the six months ended June 30, 2020 and 2021 (in thousands):

	Six Months Ended June 30,		
	2020	**2021**	**Change**
Research and development program expenses	$ 1,809	$ 32,029	$30,220
Compensation and related benefits	1,094	3,018	1,924
Other research and development	581	932	351
Total research and development expenses	$ 3,484	$ 35,979	$32,495

Total research and development expenses were $3.5 million for the six months ended June 30, 2020, compared to $36.0 million for the six months ended June 30, 2021. The increase of $32.5 million in total research and development expenses for the six months ended June 30, 2021 was primarily due to an increase of $30.2

million in program expenses, license fees accounted for $29.4 million of the increase and direct external expenses, scientific advisory consulting expenses and laboratory supplies also increased. The increase of $1.9 million in compensation and related benefit expenses for the six months ended June 30, 2021 was primarily due to increased employee-related expenses including stock-based compensation, both of which are related to the increased headcount in our research and development functions. The increase of $0.4 million in other research and development expenses for the six months ended June 30, 2021 was primarily due to an increase in facility maintenance costs and an increase in laboratory equipment depreciation.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the six months ended June 30, 2020 and 2021 (in thousands):

	Six Months Ended June 30,		
	2020	2021	Change
Compensation and related benefits	$ 494	$ 3,060	$ 2,566
Professional and consultant fees	849	2,255	1,406
Facilities, fees and other related costs	296	376	80
Total general and administrative expenses	$ 1,639	$ 5,691	$ 4,052

General and administrative expenses for the six months ended June 30, 2020 were $1.6 million, compared to $5.7 million for the six months ended June 30, 2021. The increase of $2.6 million in compensation and related benefits for the six months ended June 30, 2021 was primarily due to increased employee-related expenses attributable to the increased headcount in our general and administrative function of $0.5 million and the increased stock-based compensation of $2.1 million. The increase of $1.4 million in professional and consultant fees for the six months ended June 30, 2021 was primarily due to an increase in recruiting fees, intellectual property counsel fees, audit fees and corporate counsel fees, to support our growth as we move towards becoming a publicly traded company.

Other Income (Expense)

Interest income for the six months ended June 30, 2020 and 2021 was $0.1 million consisting of interest earned on invested cash and cash equivalent balances.

The increase in fair value of derivative liability for the six months ended June 30, 2020 and 2021 was $0 and $3.3 million due to the change in the fair value of the derivative liability recorded as a result of the Opt-In Agreement.

Service fee income from related party for the six months ended June 30, 2020 and 2021 was $0 and $0.2 million from our income related to the Alloy Pyxis JV.

Loss from Equity Method Investment in Joint Venture

We account for our investment in the Alloy Pyxis JV under the equity method. For the six months ended June 30, 2021, we recognized $0.2 million as our share of losses in the Alloy Pyxis JV. As of June 30, 2021, the aggregate carrying value of our investment in the Alloy Pyxis JV was $0.

Comparison of the Years Ended December 31, 2019 and 2020

The following table summarizes our results of operations for the years ended December 31, 2019 and 2020 (in thousands):

	Year Ended December 31,		
	2019	2020	Change
Operating expenses:			
Research and development	$ 1,224	$ 9,048	$ 7,824
General and administrative	1,655	3,846	2,191
Total operating expenses:	2,879	12,894	10,015
Loss from operations	(2,879)	(12,894)	(10,015)
Other income:			
Interest income	107	66	(41)
Total other income:	107	66	(41)
Net loss and comprehensive loss	$ (2,772)	$ (12,828)	$(10,056)

Research and Development Expenses

The following table summarizes our research and development expenses for the years ended December 31, 2019 and 2020 (in thousands):

	Year Ended December 31,		
	2019	2020	Change
Research and development program expenses	$ 604	$ 4,927	$ 4,323
Compensation and related benefits	360	2,645	2,285
Other research and development	260	1,476	1,216
Total research and development expenses	$ 1,224	$ 9,048	$ 7,824

Total research and development expenses were $1.2 million for the year ended December 31, 2019, compared to $9.0 million for the year ended December 31, 2020. The increase of $4.3 million in research and development program expenses for the year ended December 31, 2020 was primarily due to an increase in direct external expenses, scientific advisory consulting expenses and laboratory supplies. The increase of $2.3 million in compensation and related benefit expenses for the year ended December 31, 2020 was primarily due to increased employee-related expenses related to the increased headcount in our research and development functions. The increase of $1.2 million in other research and development expenses for the year ended December 31, 2020 was primarily due to an increase in facility maintenance costs and an increase in laboratory equipment depreciation.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the years ended December 31, 2019 and 2020 (in thousands):

	Year Ended December 31,		
	2019	2020	Change
Compensation and related benefits	$ 140	$ 1,387	$ 1,247
Professional and consultant fees	1,025	1,610	585
Facilities, fees and other related costs	490	849	359
Total general and administrative expenses	$ 1,655	$ 3,846	$ 2,191

General and administrative expenses for the year ended December 31, 2019 were $1.7 million, compared to $3.8 million for the year ended December 31, 2020. The increase of $1.2 million in compensation and related benefits for the year ended December 31, 2020 was primarily due to increased employee-related expenses attributable to the increased headcount in our general and administrative function of $1.0 million and the increased stock-based compensation of $0.2 million. The increase of $0.6 million in professional and consultant fees for the year ended December 31, 2020 primarily due to increased intellectual property counsel fees and corporate counsel fees. The increase in facilities, fees and other related costs of $0.4 million for the year ended December 31, 2020 was primarily due to an increase in facility costs spending related to our 2020 move to our new corporate headquarters.

Other Income

Interest income for the years ended December 31, 2019 and 2020 was $0.1 million consisting of interest earned on invested cash and cash equivalent balances. The decrease in interest income for the year ended December 31, 2020 was due to the lower cash and cash equivalent balances.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. We expect to incur significant expenses and operating losses for the foreseeable future as we advance the preclinical development of our programs. To date, we have funded our operations with proceeds from sales of convertible preferred stock. To date, we have received gross proceeds of $174.0 million from sales of our convertible preferred stock. As of June 30, 2021, we had cash and cash equivalents of $142.5 million.

Cash Flows

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

	Year Ended December 31,		Six Months Ended June 30,	
	2019	2020	2020	2021
Net cash used in operating activities	$ (2,239)	$ (10,084)	$ (4,263)	$ (15,869)
Net cash used in investing activities	—	(1,483)	(1,344)	(590)
Net cash provided by financing activities	21,955	35	3	150,852
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 19,716	$ (11,532)	$ (5,604)	$ 134,393

Operating Activities

During the year ended December 31, 2019, operating activities used $2.2 million of cash, primarily resulting from our net loss of $2.8 million, partially offset by non-cash charges of $0.1 million and net cash provided by changes in our operating assets and liabilities of $0.4 million. Net cash provided by changes in our operating assets and liabilities for the year ended December 31, 2019 consisted primarily of an increase of $0.5 million in accounts payable and accrued liabilities.

During the year ended December 31, 2020, operating activities used $10.1 million of cash, primarily resulting from our net loss of $12.8 million, partially offset by non-cash charges of $0.5 million and net cash used in changes in our operating assets and liabilities of $2.1 million. Net cash used in changes in our operating assets and liabilities for the year ended December 31, 2020 consisted primarily of increase of $2.3 million in accounts payable and accrued liabilities.

During the six months ended June 30, 2020, operating activities used $4.3 million of cash, primarily resulting from our net loss of $5.1 million, partially offset by non-cash charges of $0.1 million and net cash provided by changes in our operating assets and liabilities of $0.7 million. Net cash provided by changes in our operating assets and liabilities for the six months ended June 30, 2020 consisted primarily of an increase of $0.8 million in accounts payable and accrued liabilities.

During the six months ended June 30, 2021, operating activities used $15.9 million of cash, primarily resulting from our net loss of $45.0 million, partially offset by non-cash charges of $27.0 million and net cash used in changes in our operating assets and liabilities of $2.1 million. The non-cash charges of $27.0 million was primarily due to the $20.0 million of research and development license fees for Pfizer and LegoChem paid in Series B Convertible Preferred Stock, the $3.2 million change in the fair value of derivative liability and $3.0 million in stock-based compensation. Net cash provided by changes in our operating assets and liabilities for the six months ended June 30, 2021 consisted primarily of an increase of $3.4 million in the derivative liability. Changes in accounts payable, accrued liabilities and prepaid and other current assets were generally due to growth in our business, the advancement of our research programs, and the timing of vendor invoicing and payments.

Investing Activities

During the year ended December 31, 2020, net cash used in investing activities was $1.5 million due to purchases of property and equipment. The purchases of property and equipment during the year ended December 31, 2020 represented laboratory equipment, leasehold improvements, and furniture and fixtures purchases for our corporate headquarters, which we began occupying in 2020. There were no property and equipment purchased during the year ended December 31, 2019.

During the six months ended June 30, 2020 and 2021, net cash used in investing activities was $1.3 million and $0.6 million, respectively, due to purchases of property and equipment. The purchases of property and equipment represented laboratory equipment, leasehold improvements, and furniture and fixtures purchases. During the six months ended June 30, 2021, we also made an investment in our joint venture, the Alloy Pyxis JV, for $0.1 million.

Financing Activities

During the years ended December 31, 2019 and 2020, net cash provided by financing activities was $22.0 million and less than $0.1 million, respectively, consisting primarily of net proceeds from the sale of our Series A convertible preferred stock and the issuance of common and restricted stock.

During the six months ended June 30, 2021, net cash provided by financing activities was $150.9 million, consisting primarily of net proceeds of $151.6 million from the sale of our Series B convertible preferred stock, offset by $0.8 million of deferred offering costs.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials for our product candidates in development. The timing and amount of our funding requirements will depend on many factors, including:

- the manufacture of product candidates, completion of our IND enabling studies and initiation of Phase 1 clinical trials for PYX-201, PYX-202 and PYX-203;
- the timing and progress of our other preclinical and clinical development activities;
- the number and scope of other preclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we have entered or may in the future enter into in-licensing, collaborations and research and development agreements;

- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing licensure;
- our ability to maintain our current licenses and research and development programs and to establish new collaboration arrangements;
- the costs involved in prosecuting, maintaining and enforcing patent and other intellectual property rights;
- any delays or interruptions, including due to the COVID-19 pandemic, that we experience in our preclinical studies, future clinical trials and/or supply chain;
- the cost and timing of regulatory licenses; and
- our efforts to hire additional clinical, regulatory, scientific, operational, financial and management personnel.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will enable us to fund our operating expenses and capital expenditure requirements through the . However, we have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, we could utilize our available capital resources sooner than we expect.

Until such time, if ever, we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions, engaging in acquisition, merger or collaboration transactions, selling or licensing our assets, making capital expenditures, redeeming our stock, making certain investments or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings 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.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of December 31, 2020 and the effects that such obligations are expected to have on our liquidity and cash flows in future periods.

We lease our operating facility in Cambridge, Massachusetts under an non-cancellable operating lease agreement for our corporate headquarters and laboratory space which expires in March 2022, with a remaining lease obligation of $0.5 million.

During 2020, we entered into several licensing and related agreements in the normal course of business. In accordance with the agreements, we are obligated to pay, among other items, future contingent payments, royalties, and sublicensing revenue in the future, as applicable. As of December 31, 2020, we recorded $0.5 million in accrued expenses and other current liabilities related to the LegoChem Opt-In Agreement. No other obligations were recorded as of December 31, 2020, as the related contingencies were not resolved and there were no other legal obligations or commitments as of December 31, 2020.

Pursuant to the LegoChem license agreement, we paid $9.0 million and issued shares of Series B Convertible Preferred Stock in 2021. In addition, in 2021, we settled $0.5 million of the accrued expenses and

other current liabilities described above through the issuance of shares of Series B Convertible Preferred Stock as part of its Series B financing. LegoChem exercised its option in December 2020 under the Opt-In Agreement to make a $8.0 million payment, which we received in April 2021, in exchange for the right to receive an extra milestone payment of $9.6 million upon the earliest to occur of the certain events, including the date of pricing or offer of the first public offering of its common stock or if there is a change of control transaction. See Note 8 to our audited consolidated financial statements and Note 5 to our unaudited condensed financial statements appearing elsewhere in this prospectus for additional information.

Pursuant to the Pfizer license agreement, which has an effective date of March 2021, we incurred a combined $25.0 million, consisting of an upfront fee payment equal to $5.0 million and the issuance of 12,152,145 shares of Series B Convertible Preferred Stock with a value of $20.0 million in 2021.

We enter into contracts in the normal course of business with CMOs, CROs and other third parties for preclinical studies. These contracts do not contain minimum purchase commitments and are cancelable by us upon prior written notice. Payments due upon cancellation consist only of payments for services provided or expenses incurred, including non-cancelable obligations of our service providers, up to the date of cancellation. These payments are not included in the table of contractual obligations above as the amount and timing of such payments are not known.

Critical Accounting Policies and Significant Judgments and Estimates

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

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

Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. At each period end, we corroborate the accuracy of these estimates with the service providers and make adjustments, if necessary. Examples of estimated accrued research and development expenses include those related to fees paid to:

- vendors in connection with discovery and preclinical development activities; and
- CROs in connection with preclinical studies and clinical trials.

We record the expense and accrual related to contract research and manufacturing based on our estimates of the services received and efforts expended considering a number of factors, including our knowledge of the

progress towards completion of the research, development and manufacturing activities; invoicing to date under contracts; communication from the CROs, CMOs and other companies of any actual costs incurred during the period that have not yet been invoiced; and the costs included in the contracts and purchase orders. The financial terms of these agreements are subject to negotiation, vary from contract to contract, and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or the amount of prepaid expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

We currently measure all stock-based awards granted to employees, non-employees and directors based on their fair value on the date of the grant using the Black-Scholes option-pricing model for options or the difference, if any, between the purchase price per share of the award and the fair value of our common stock for restricted stock awards. Compensation expense for employee awards is recognized over the requisite service period, which is generally the vesting period of the respective award. Compensation expense for non-employee and director awards is recognized in the same manner as if we had paid cash in exchange for the goods or services, which is generally the vesting period of the award. We use the straight-line method to record the expense of awards with only service-based vesting conditions. We account for forfeitures of stock-based awards as they occur.

The Black-Scholes option-pricing model uses as inputs the fair value of our common stock and assumptions we make for the expected volatility of our common stock, the expected term of stock options, the risk-free interest rate for a period that approximates the expected term of our common stock options and our expected dividend yield. The following summarizes the inputs used:

Expected Volatility—The Company lacks company-specific historical and implied volatility information. Therefore, we estimate the expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until the Company has adequate historical data regarding the volatility of the Company's traded stock price.

Expected Term—We use the simplified method described in the SEC's Staff Accounting Bulletin No. 107, Share-Based Payment ("SAB 107"), to determine the expected life of the option grants.

Risk-Free Interest Rate—The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.

Dividends—Expected dividend yield is zero because we have not paid cash dividends on shares of common stock and do not expect to pay any cash dividends in the foreseeable future.

Determination of Fair Value of Common Stock

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of grant of each option award, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may

have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common stock valuations were prepared using either an option pricing method, or OPM, or a hybrid method, both of which used market approaches to estimate our enterprise value. The hybrid method is a probability-weighted expected return method, or PWERM, where the equity value in one or more of the scenarios is calculated using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. 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 the OPM 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. These third-party valuations were performed at various dates, which resulted in valuations of our common stock of $0.01 per share as of July 31, 2019, $0.35 per share as of September 30, 2020, $0.84 per share as of February 28, 2021, and $1.37 per share as of June 30, 2021.

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

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

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

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

Options Granted

The following table summarizes by grant date the number of shares of common stock subject to options granted between December 2019 through September 15, 2021, the per share exercise price of the options, the per share fair value of our common stock on each grant date, and the per share estimated fair value of the options:

Grant Date	Number of Shares Subject to Options Granted	Award Type	Per Share Exercise Price of Options	Per Share Fair Value of Common Stock on Grant Date	Per Share Estimated Fair Value of Awards
January 22, 2019(1)	6,325,000	Restricted Stock	$ 0.00	$ 0.00	$ 0.00
December 6, 2019	3,006,750	Options	$ 0.01	$ 0.01	$ 0.01
April 8, 2020	839,641	Options	$ 0.01	$ 0.01	$ 0.01
July 15, 2020	437,710	Options	$ 0.01	$ 0.01	$ 0.01
November 18, 2020	369,178	Options	$ 0.35	$ 0.35	$ 0.24
December 15, 2020	7,588	Options	$ 0.35	$ 0.35	$ 0.24
March 31, 2021	15,890,084	Options	$ 0.84	$ 0.84	$ 0.56
April 23, 2021	245,914	Options	$ 0.84	$ 0.84	$ 0.56
July 31, 2021	2,472,921	Options	$ 1.37	$ 1.37	$ 0.88
August 2, 2021	163,943	Options	$ 1.37	$ 1.37	$ 0.88
August 16, 2021	255,914	Options	$ 1.37	$ 1.37	$ 0.88
August 19, 2021	500,000	Options	$ 1.37	$ 1.37	$ 0.88
August 23, 2021	2,090,000	Options	$ 1.37	$ 1.37	$ 0.88
September 13, 2021	1,000,000	Options	$ 1.37	$ 1.37	$ 0.88
September 15, 2021	733,871	Options	$ 1.37	$ 1.37	$ 0.88

(1) The January 22, 2019 grants consist of 6,325,000 restricted stock awards issued at $0.002 per share.

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 Securities and Exchange Commission.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our audited and unaudited condensed consolidated financial statements appearing elsewhere in this prospectus.

Other Company Information

The Jumpstart Our Business Startups Act of 2012 permits an “emerging growth company” such as us to take advantage of an extended transition period to comply with new or revised accounting standards. We have elected not to “opt out” of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we can adopt the new or revised standard at the time private companies adopt the new or revised standard and may do so until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies. We will continue to remain an “emerging growth company” until the earliest of the following: (1) the last day of the fiscal year following the fifth anniversary of the date of the completion of this offering; (2) the

last day of the fiscal year in which our total annual gross revenue is equal to or more than $1.07 billion; (3) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or (4) 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 shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700 million. 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 have reduced disclosure obligations regarding executive compensation, and, similar to emerging growth companies, if we are a smaller reporting company with less than $100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

Quantitative and Qualitative Disclosures about Market Risks

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 consist primarily of short-term money market funds. As of June 30, 2021, we had cash and cash equivalents of $142.5 million. Interest income is sensitive to changes in the general level of interest rates; however, due to the nature of these investments, an immediate 10% change in market interest rates would not have a material effect on the fair market value of our investment portfolio.

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates. Our operations may be subject to fluctuations in foreign currency exchange rates in the future.

Inflation could affect us by increasing our cost of labor and preclinical activity costs. We do not believe that inflation has had a material effect on our business, financial condition, or results of operations for any periods presented herein.

BUSINESS

Overview

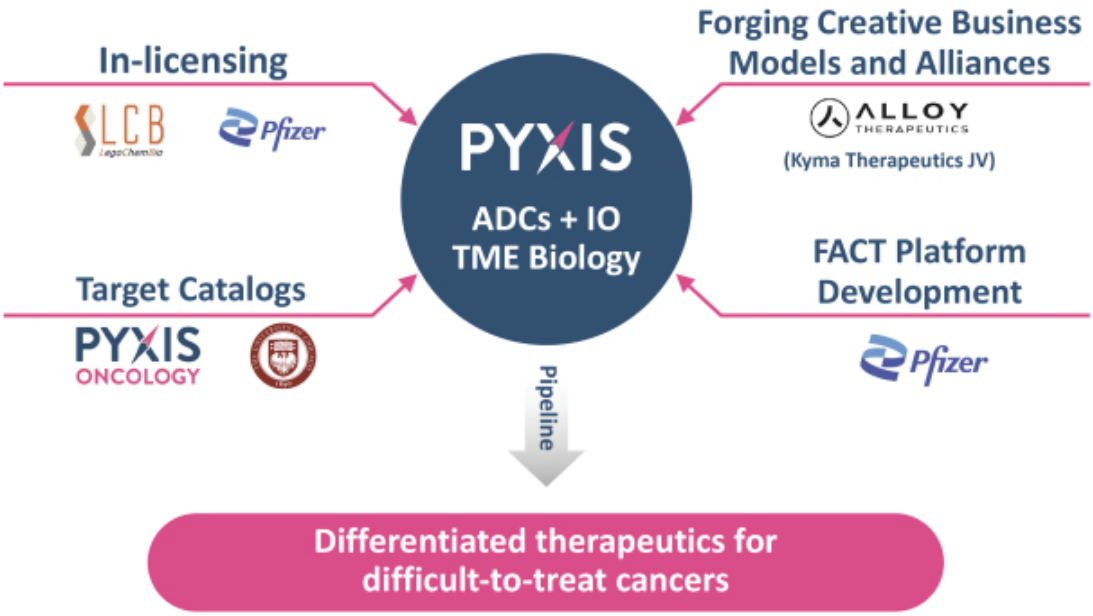
We are a preclinical oncology company focused on developing an arsenal of next-generation therapeutics to target difficult-to-treat cancers and improve quality of life for patients. We develop our product candidates with the objective to directly kill tumor cells, and to address the underlying pathologies created by cancer that enable its uncontrollable proliferation and immune evasion. Since our launch in 2019, we have developed a broad portfolio of novel antibody drug conjugate, or ADC, product candidates, and monoclonal antibody, or mAb, preclinical discovery programs that we are developing as monotherapies and in combination with other therapies.

We take a holistic view of attacking the key drivers of tumor growth and progression within the tumor microenvironment, or TME, including targeting of tumor antigens and modulating the innate and adaptive immune response. The TME is an immunosuppressive environment consisting of cancer cells and stroma, which includes the blood vessels, immune cells, fibroblasts, signaling molecules, and the extracellular matrix that surrounds the tumor. The TME plays multiple roles in tumor formation, progression and metastasis as well as anti-tumor immune activity. We are developing our ADC and mAb product candidates to precisely target key modulators of the adaptive and innate immune system within the TME for difficult-to-treat solid and hematologic tumors.

By leveraging our expert knowledge of the TME and established business development track record, we are developing cancer therapies and technologies through multiple avenues (see Figure 1) including:

- **Platform Development:** We are capitalizing on years of industry innovation and advancement in ADC platforms to develop and design our product candidates. For example, our product candidates PYX-201 and PYX-203 are built utilizing the Flexible Antibody Conjugation Technology, or FACT, platform technology in-licensed from Pfizer. FACT technology leverages over a decade of investment refining the technical components of ADCs to improve the clinical properties of ADCs. Using our expertise in site- specific antibody conjugation, we are developing next-generation ADCs with customized linker-payload combinations aimed at increasing stability and, consequently, a reduced off target side-effect profile potentially enhancing the therapeutic index, or TI.
- **Target Catalog**: We have a large proprietary target catalog that is based on our own discovery activities and the in-licensed intellectual property, or IP, that formed the founding of the company from the University of Chicago out of the work of Dr. Thomas Gajewski's laboratory. We believe that our target catalog will enable us to identify new ways to exploit multiple components of the TME for tumor targeting, either as new immuno-oncology, or IO, or ADC targets.
- **Forging Creative Business Models and Alliances:** We are continuously evaluating business development and alliance opportunities with a variety of third parties. We aim to be unconstrained by conventional ideas and practices to overcome the many and complex challenges of cancer treatment. We are creating development optionality by engaging in creative business models to further expand the pipeline such as our joint venture with Alloy Therapeutics, which we refer to as the Alloy Pyxis JV. See "—Licensing and Collaboration Agreements."
- **Product In-Licensing:** We selectively seek to in-license product candidates to expand our product pipeline. For example, our PYX-202 (DLK1 ADC) product candidate was in-licensed from LegoChem. Additionally, we also in-licensed PYX-201 (EDB ADC) and PYX-203 (CD123 ADC) from Pfizer.

Figure 1



Our Portfolio

Our ADCs utilize next-generation technologies that, based on observations from preclinical studies, may allow for increased stability and a reduced off target side-effect profile. We in-licensed two ADC programs in March 2021 from Pfizer and one ADC program from LegoChem in December 2020. See "—Licensing and Collaboration Agreements." Our two most advanced product candidates, PYX-201 and PYX-202, are in IND-enabling studies. In addition, PYX-203 is in preclinical development and we have additional preclinical mAb discovery programs derived from work at the laboratory of Dr. Thomas Gajewski. We retain full worldwide development and commercialization rights to all our product candidates, with the exception of PYX-202 in South Korea. See "—Licensing and Collaboration Agreements." We intend to develop each of our programs as a monotherapy and potentially also in combination with other therapies.

We are focusing our efforts on eliminating tumor cells through the selective antibody mediated delivery of cytotoxic payloads and by modulating key immune-associated pathways in the TME. We believe our pipeline has the potential to profoundly benefit cancer patients and provide effective treatment options for those who do not respond to currently available therapies.

ADCs are an established therapeutic modality, with eleven currently approved by the FDA, including six since 2019. Additionally, ADCs have received significant strategic interest from several pharmaceutical companies developing oncology therapeutics. ADCs are a combination of three key components—antibody, linker and cytotoxic payload. Many ADCs utilizing conjugation to existing lysine or cystine residues in the antibody, or conventional ADCs, struggled with one or more of these three key components, leading to heightened toxicity and limited efficacy. Despite the improvements that have been seen with currently marketed ADCs, these ADCs still have limitations that impact dosing, and are associated with significant adverse events. We have designed our product candidates to overcome the limitations of ADCs that use conventional conjugation with the aim of providing patients with safer and more efficacious treatment options.

Our current pipeline is summarized below.

Figure 2

PYX-201 is an investigational, novel ADC consisting of an Immunoglobulin G1, or IgG1, anti-fibronectin Extradomain-B, or EDB, mAb conjugated to auristatin via a site-specific cathepsin B-cleavable linker. Fibronectin is a glycoprotein found in the extracellular matrix. Fibronectin EDB regulates blood vessel morphogenesis, which provides the tumor access to nutrition and oxygen, a means to remove waste, and a pathway for metastasizing cells. EDB is overexpressed in many malignancies and is minimally expressed in most normal adult tissues, making it a potentially attractive means to target tumors while sparing healthy cells. In preclinical models of patient derived xenograft, or PDX models, we observed tumor regression with single agent PYX-201. In addition, we observed that the treatment of preclinical syngeneic tumor models with PYX-201 resulted in T cell infiltration, which is a hallmark of immunogenic cell death, or ICD, and enhanced infiltration of T cells into the TME, enabling synergistic activity in combination with a checkpoint inhibitor. We anticipate submitting an IND by mid-2022.

PYX-202 is an investigational, novel ADC consisting of an IgG1 anti-Delta-like 1 homolog, or DLK1, mAb conjugated to MMAE via a site-specific plasma-stable ß-glucuronide linker. DLK1 is a transmembrane protein normally expressed in embryonic tissues but highly restricted in healthy adult tissues. DLK1 becomes re-expressed in certain solid tumor malignancies. PYX-202 is designed to use the microtubule-disrupting MMAE payload, which is utilized in three currently marketed ADCs providing clinical support that the payload has anti-tumor effect potential. In preclinical small cell lung cancer, or SCLC, PDX models, as well as in a human cell line-based, or CDX, mouse model of cancer, we have observed significant anti-tumor activity as measured by durable tumor regression. We anticipate submitting an IND by mid-2022.

PYX-203 is an investigational ADC consisting of an IgG1 anti-CD123 mAb dimeric antibody conjugated to a novel cyclopropylpyrroloindoline, or CPI dimer payload via a site-specific plasma-stable, cleavable linker. CD123, or IL-3Ra, is a cell surface antigen highly expressed on leukemic stem cells and leukemic blasts in acute myeloid leukemia, or AML. PYX-203, utilizes a novel DNA-damaging toxin, CPI, and we have observed significant anti-tumor activity as measured by the reduction in the frequency of the leukemic cells in the blood and bone marrow in nine disseminated preclinical AML models. We anticipate submitting an IND by 2023.

In addition to the programs identified above, we are conducting research and development activities on various targets, leveraging our expertise in monoclonal antibodies and understanding of immuno-oncology. Our preclinical discovery programs are novel antibody programs intended to enhance the anti-tumor activity of natural killer, or NK cells, and T cells and to overcome immunosuppressive activity of tumor resident myeloid cells such as tumor associated macrophages, or TAMs, and myeloid derived suppressor cells, or MDSCs.

Our Team and History

We have assembled a world class management team with deep experience in oncology research and development and a demonstrated track record of executing business development transactions and advancing programs through various stages of development at or on behalf of leading pharmaceutical companies such as Pfizer, AstraZeneca, SpringWorks, Taris and MedImmune. Our executive team has a track record of success, building public biotech companies and developing innovative medicines. Our Chief Executive Officer, Lara Sullivan, M.D., was founder and President of SpringWorks Therapeutics, our Chief Scientific Officer, Ronald Herbst, Ph.D., was the originator of a majority of Viela Bio's founding portfolio, our Chief Medical Officer, Jay Feingold, M.D., Ph.D., was most recently a Senior Vice President, the Chief Medical Officer and Head of Oncology Clinical Development at ADC Therapeutics and our Chief Financial Officer, Pamela Connealy, was most recently the Chief Financial Officer of Immunovant. Our management team is supported by our operating team and scientific advisory board, who offer industry leading expertise in drug discovery and development, as well as technical expertise in ADCs. Our leadership team has built a synergistic network of relationships across the life sciences industry, with leading institutions, academics and corporations. We intend to leverage our industry relationships and execution excellence to identify potential strategic partnerships, accelerate our pipeline and enhance our drug development capabilities.

We were founded by Longwood Fund and launched in July 2019, having acquired the rights to immuno-oncology IP that originated out of Dr. Thomas Gajewski's laboratory at the University of Chicago. We have also in-licensed ADC assets from LegoChem and Pfizer and have licensed the rights to Pfizer's ADC technology platform, which includes various payload classes, linkers, and site-specific conjugation techniques, which we call the FACT platform. We have raised $174 million to date from leading strategic and institutional investors, which include Longwood Fund, Leaps by Bayer, Arix Bioscience, RTW Investments, LP, Perceptive Advisors, RA Capital Management, Pfizer Ventures and other institutional investors.

Our Strategy

Our goal is to improve the lives of patients with difficult-to-treat cancers by building a superior portfolio of biological products, including ADCs and monoclonal antibody immunotherapies.

Elements of our strategy to achieve our short and long-term goals include:

- **Pursue a multi-modality approach to cancer therapy addressing various key components of the TME.** Our approach is to leverage our capabilities to develop investigational products that directly target tumor cells and stromal components of the TME with ADCs as well as enhance effector cell function and overcome key mechanisms of immune-suppression with immunotherapeutic mAbs to improve response rates and/or deliver durable responses for more patients.
- **Progress our most advanced product candidates, PYX-201 and PYX-202, into and through clinical development.** We believe that our preclinical data to date support the clinical potential of PYX-201 and PYX-202 as monotherapies and in combination with other cancer therapies, including immunotherapies and product candidates within our own portfolio. We expect to submit at least two INDs in 2022.
- **Efficiently progress our preclinical IO programs.** We plan to continue the preclinical development of our pipeline of immunotherapies. If approved, we believe these monoclonal antibody programs have the potential to overcome several of the mechanisms responsible for suppressing immune function and effector cell activity, thus enhancing the anti-tumor immune response in the TME. We also plan to leverage the potential ability of certain ADCs to induce immunogenic cell death to support synergistic combinations with IO agents, including those derived through our own programs .
- **Continue to leverage the FACT platform and our Target Catalog to expand our pipeline of product candidates.** We plan to continue to mine our target catalog to identify new ways to exploit multiple components of the TME for tumor targeting. Our target catalog may help identify critical immunomodulatory pathways within the TME that can be addressed with monoclonal antibodies. We plan to use our target catalog and the FACT platform to develop differentiated ADCs with potentially superior clinical activity relative to the current standards of care including monoclonal antibodies. Additionally, we intend to use the FACT platform to develop ADCs for attractive targets beyond our target catalog.

- **Selectively forge alliances to enhance and expand our product pipeline to further leverage our intellectual property**. We believe that the potential for single agent anti-tumor activity of our current and future products could be enhanced by incorporating potential collaborator technologies. We intend to selectively form alliances with partners to gain access to complementary technologies and expertise to develop and commercialize product candidates with increased potential for anti-tumor activity and the potential for a strong safety profile. We seek to further leverage our intellectual property portfolio through the formation of these alliances.
- **Leverage our team's deep experience and proficiency in oncology research and development to discover and advance novel ADC and immuno-oncology treatments for patients suffering from difficult-to-treat cancers.** We believe our team, which brings deep scientific TME knowledge, functional biology expertise, ADC and IO modality experience, and biologics development capabilities position us to build a leading oncology company focused on developing product candidates for cancers with high unmet need. We intend to continue to augment the team's experience and proficiency through the addition of new members.

Unmet Need in Oncology

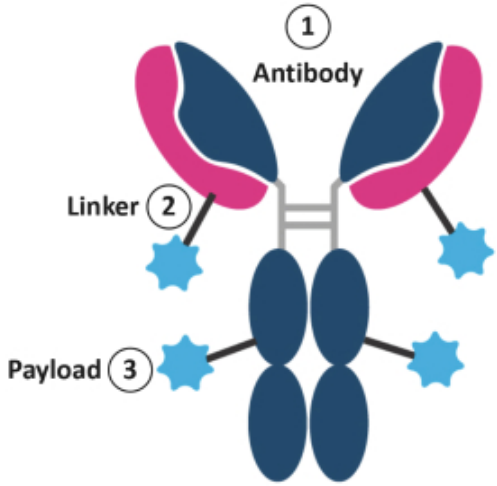
Despite the significant advances in oncology with the approval of several new classes of drugs, there remains significant unmet medical need for novel treatments. According to the World Health Organization, cancer is the second leading cause of death globally, accounting for nearly 10 million deaths in 2020. The key limitations of existing oncology treatments include high toxicity, low or limited response rates, and relapse or recurrence.

Chemotherapy remains one of the most common treatments for cancer, often combined with surgery and radiotherapy depending on the stage and type of tumor. A major challenge in the development of cancer treatments has been the overall complexity and heterogeneity not only of tumors, but of their dynamic surrounding microenvironments. While recent advances in treatment approaches, such as targeting specific tumor mutations that contribute to carcinogenesis or redirecting a patient's immune system to eliminate tumors, have begun to address these challenges, their focus has largely been on tumor cells. We believe that targeting the TME, which has been shown to play a key role in driving tumor progression, growth and multidrug resistance, represents a novel approach for addressing unmet needs in oncology. For example, while the development of immune checkpoint inhibitors has transformed the treatment paradigm for numerous cancers, many patients who respond to these therapies ultimately develop resistance and experience disease progression. Many features of the TME have been shown to influence response and resistance to immune checkpoint inhibitors and targeting the TME has potential to overcome these limitations. Our development efforts aim to leverage our deep understanding of the TME biology with the goal of designing and developing next-generation ADCs, with site-specific conjugation and customized linker-payload combinations, and immunotherapies that target key modulators of the adaptive and innate immune system found within the TME.

Overview of Antibody Drug Conjugates

ADCs are a therapeutic class in which cytotoxic chemotherapy molecules are linked to a targeting mAb to effectively deliver the tumor killing effect into tumor lesions while limiting systemic toxicity. Systemic toxicity limits the efficacy of chemotherapy, a highly cytotoxic class of anti-tumor medicines. ADCs can significantly improve the therapeutic window of toxic payloads even more cytotoxic than traditional chemotherapies by targeting their delivery to tumorous cells and their local environment and sparing healthy tissue. ADCs achieve this level of precision by pairing payloads with monoclonal antibodies, proteins that can recognize their target antigens with great specificity. ADCs are an established and fast-growing class of biological products. To date, eleven ADCs have been FDA approved, of which six have entered the market since 2019.

Figure 3



Schematic representation of an ADC, highlighting the three key components; targeted antibody, linker, and payload or cytotoxic agent(dark blue: mAb heavy chain; pink: mAb light chain).

The clinical properties of ADCs are a function of three components (Figure 3):

1) A monoclonal antibody that selectively targets a distinct antigen preferentially expressed on tumor cells or other cells in the tumor microenvironment;

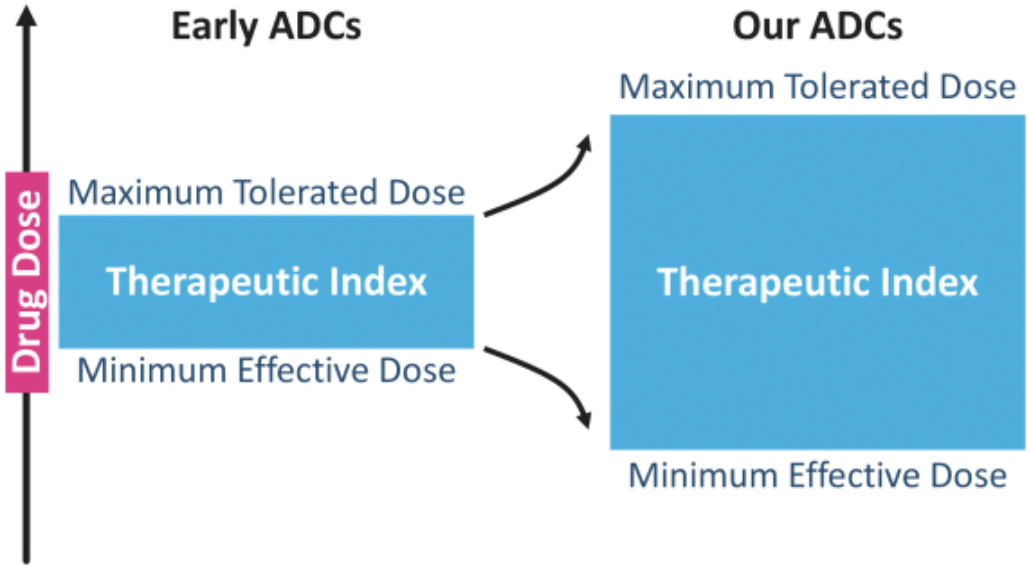
2) A linker that joins together the antibody and the payload; and

3) A payload that can effectively kill the targeted cell.

Ideal ADC targets typically have highly tumor restricted expression to spare healthy tissues, are accessible to circulating antibodies, and have well-defined internalization kinetics or can be effectively bound within the TME. Once administered, an ADC will travel in the bloodstream until it encounters its target antigen followed by release of the toxic payload.

A measure of drug tolerability for ADCs is the preclinical therapeutic index, which is calculated from data to estimate the safety profile (Figure 4). This measure is the preclinical ratio of the highest non-severely toxic dose, or HNSTD in monkeys versus the minimally effective dose, or MED in mouse tumor models. The therapeutic index is defined formulaically as HNSTD (mg/m^2) in monkeys / mouse minimal tumor regression dose (mg/m^2). As further illustrated in the figure below, a wider therapeutic index is a key attribute of an ADC's potential clinical success.

Figure 4



The therapeutic index is a measure to estimate the clinical tolerability profile of ADCs based upon the ratio of maximum tolerated dose, or MTD, in monkeys versus the minimally effective dose in rodents from preclinical studies.

Key Areas of Innovation for Engineering the Next-Generation ADCs

Optimizing the Linker

The linker that joins the payload to the antibody should prevent the payload's premature release while in circulation and ensure efficient release of the payload into the target cell(s) and/or the TME. There are two general classes of linkers:

1) Cleavable linkers are designed to conditionally unload cytotoxic agents within the tumor cell or TME in response to the presence of tumor-associated factors such as proteases or highly acidic conditions. Typically, cleavable linkers carry uncharged payloads, allowing the drug to diffuse out of the target cell to kill surrounding "bystander cells." Bystander killing can also occur when the uncharged payload is unleashed within the TME.

2) In contrast, non-cleavable linkers remain intact upon internalization and rely on lysosomal degradation of the entire construct to achieve sufficient payload release. Non-cleavable ADCs typically release their payloads as charged catabolites, which traps the toxin within the cell where it was internalized. As a result, non-cleavable ADCs are naturally well suited to address cancers with a high and uniform expression of the target antigen since cells lacking the target antigen will not be directly affected.

We believe our toolbox of cleavable and non-cleavable linkers allows us to select the optimal linker tailored to each program. We select our linkers based on several factors, including but not limited to the level and distribution of the target antigen and rates of antigen turnover, internalization, lysosomal processing, and degradation.

Site-Specific Conjugation

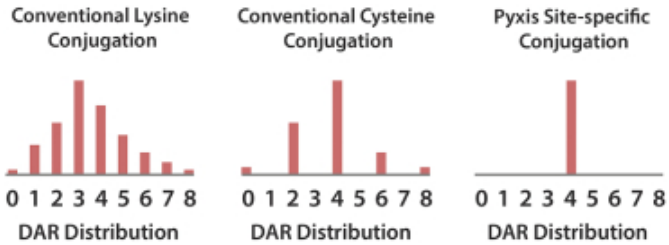
Site-specific conjugation chemistry enables the engineering of next-generation ADCs with predictable and homogenous drug-to-antibody ratio, or DAR, with improved ADC pharmacokinetics observed preclinically. This improved PK results in minimizing premature payload release and less off-target toxicity and as a result improves the overall TI of the ADC.

DAR is defined as the number of payload moieties attached to each antibody, which typically range from zero to eight. Ideally, there is limited variability in DAR to allow for homogenous ADCs with predictable PK and more predictable efficacy. Variability in DAR and stability are primarily a consequence of the technology used to conjugate the linker to the antibody. The two conventional conjugation approaches employed in conventional ADC conjugation technology utilize either lysine residues or the interchain disulfides located on an antibody. These approaches result in a stochastic mixture of conjugates consisting of a heterogeneous pool of synthesized ADCs, as shown in Figure 5 below. Each bar in the graph consists of an ADC with the number of payloads indicated on the X-axis. Each one of these parts of the mixture of conjugates contributes to the efficacy and toxicity making it difficult to optimize for either property.

In addition to DAR, research has shown conjugate stability and the resulting rate of payload release can vary significantly between specific conjugation sites. Hence, conventional conjugation suffers from unpredictable and premature payload release outside of the tumor resulting in off target toxicities.

Together with our extensive toolbox of linkers, we believe our site-specific conjugation chemistry offers us the advantage of fine-tuning and optimizing the cleavage of the drug in the TME while limiting off-tumor release and allowing for homogenous DAR distribution. Site-specific conjugation technologies have led to improved ADC homogeneity with narrow distribution of DAR to facilitate CMC manufacture and consistent potency (Figure 5).

Figure 5



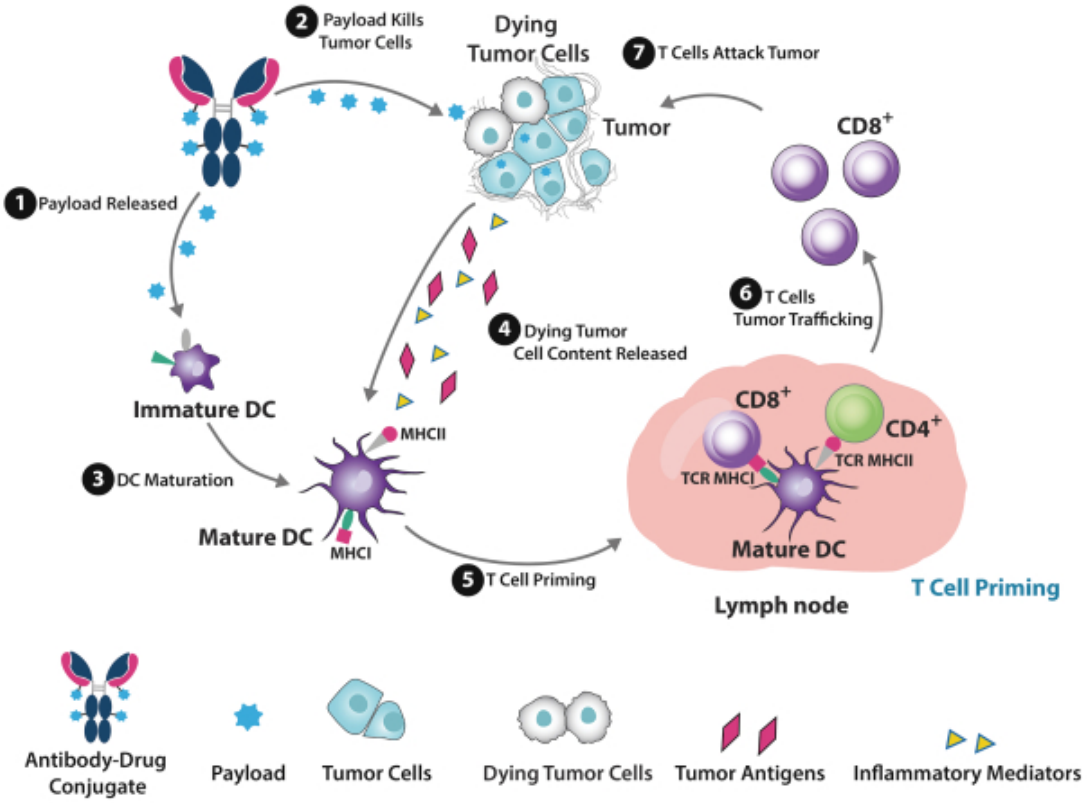
Depicted above is an illustrative example of DAR distribution for a DAR 4 ADC using different conjugation chemistries which highlights how our site-specific conjugation technology allows for linker/payload to be precisely conjugated, leading to more homogeneous DAR ADCs. This also improves CMC characteristics and enhances stability of ADCs to maximize tumor delivery of the payload.

The Selection of Cytotoxic Payload

The chemotherapeutic payload is a highly potent toxin that would otherwise carry devastating side effects as a systemically delivered monotherapy. There are several potential payloads, including antineoplastic auristatins, which act on microtubules to inhibit cell division, and alkylating or intercalating agents, which damage DNA.

While an ADC's primary mode of action is to induce direct cell death through the payload, ADCs can exploit multiple avenues of anti-tumor action beyond direct cytotoxicity. For example, a growing area of interest is applying ADCs to induce ICD allowing for synergy with immunotherapy modalities including checkpoint inhibitors. Rapid cancer cell death caused by ADCs results in the release of damage-associated molecular patterns and tumor antigens, stimulating a tumor-specific immune response and recruitment of T cells into the TME (Figure 6). An emerging area of interest is utilizing ADCs to disrupt various aspects of the TME, such as angiogenesis or tumor-associated fibroblasts. Furthermore, certain payloads, such as auristatins, have been shown to engender the maturation and activation of dendritic cells, a critical compartment of the immune system responsible for initiating and regulating the innate and adaptive immune response.

Figure 6



Overview of the process by which ADCs, particularly those with certain payloads, can potentially trigger hallmarks of immunogenic cell death to enhance tumor cell killing

ADCs have and may continue to revolutionize the treatment paradigm for several cancers. Despite the improvements that have been seen with currently marketed ADCs, these ADCs still have limitations that impact

dosing, and are associated with significant adverse events. We have designed our product candidates to overcome the limitations of ADCs that use conventional conjugation with the aim of providing patients with safer and more efficacious treatment options. We believe that our combined expertise in ADC design and insights into TME biology have the potential to yield a holistic treatment spanning multiple mechanisms for patients with difficult-to-treat cancers that will overcome the current limitation of ADCs and result in better outcomes for patients.

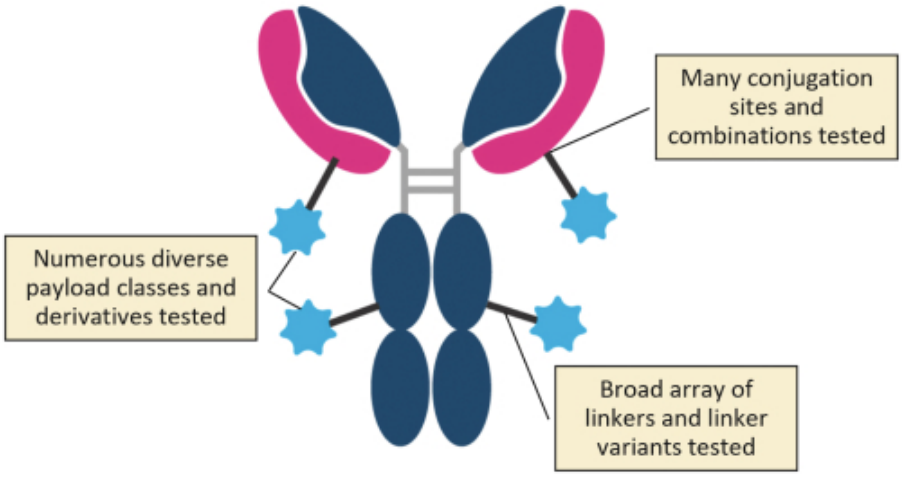
FACT Platform

We are developing next-generation ADCs using customized linker-payload combinations that are novel and supported by the preclinical data and site-specific conjugation techniques derived from the FACT platform. We believe that these payloads and linkers could be readily applied to any IgG1 antibodies using our site-specific conjugation techniques to efficiently develop novel product candidates. We licensed the FACT platform from Pfizer in December 2020 and benefit from over a decade of research and investment by Pfizer. See "—Licensing and Collaboration Agreements." We believe that the site-specific conjugation techniques and ADC technology which underpin the FACT platform enable us to develop next-generation ADCs with more favorable drug properties than traditional technologies based on preclinical studies.

Despite the clinical successes of ADCs as a therapeutic class, many ADCs still utilize conventional non-site-specific conjugation techniques that result in a heterogeneous mixture of ADCs with varying DAR. Recently, preclinical research carried out by Pfizer to empirically assess the impact of conjugation sites on ADC stability and activity in rodent models has indicated that site-specific conjugation techniques may enable enhanced pharmacologic properties and homogenous DAR to potentially improve the therapeutic index.

Though multiple reports have shown that site-specific conjugation techniques often result in ADCs with a wider therapeutic index, greater stability, and better efficacy in preclinical *in vivo* models than traditional non-specific, conventional ADC conjugates, less is understood about how to optimize these sites, as optimization relies upon empirical data generation for each specific linker-payload combination. We believe that the FACT platform has demonstrated that there are multiple biochemical parameters of ADCs impacting performance *in vivo* and established a framework for optimized conjugation sites for a variety of linker-payload combinations.

Figure 7



The FACT platform technology is designed to empirically define optimal conjugation sites for linker-payloads to generate highly stable and homogeneous ADCs with potential for improved therapeutic indices.

Pfizer optimized sites for linker-payload conjugation through empirical research

We believe that the FACT platform provides a toolkit of novel and validated payloads, cleavable and non-cleavable linkers, and a strong understanding of optimized conjugation sites. The FACT platform provides the basis for our PYX-201 and PYX-203 preclinical programs and will underpin our development of future ADCs that we believe are optimized for, and guided by the following design elements:

- **ADC cytotoxicity**. Target tumor cells require delivery of a certain threshold of payload molecules based on the payload's biochemical properties to induce cell killing at specific dose levels. Our ADC programs are designed to provide anti-tumor cytotoxicity and, as applicable, immunogenic cell death based on data from preclinical models.
- **Plasma stability and maintenance of the linker-payload**. ADCs must be optimized for systemic circulation to prevent premature linker cleavage or release of the linker-payload construct in the blood plasma that can result in off-target toxicity. We are designing our ADC candidates to optimize for stability when in circulation *in vivo* to avoid premature cleavage and support maximal payload delivery to the target site.
- **Efficient proteolytic cleavage of the linker for payload release**. The timing and rate of linker cleavage is important for achieving optimal delivery and release of a specific payload at the target site. We believe that we have the capability to utilize both cleavable and non-cleavable linkers to achieve potential therapeutic effects that are optimized for individual payloads and targets.
- **High target specificity**. Our ADC programs are founded on the identification of promising tumor targets and developing highly specific antibodies against these tumor targets. We draw upon our empirical understanding of site-specific conjugation sites and linker-payload toolkit to select combinations that we believe are well-suited for individual targets.
- **Defined and homogenous DAR.** Intrinsic to the FACT platform and conjugation techniques is the development of products with a consistent DAR, which we believe may enable us to develop a homogenous product with optimized stability, tolerability, and cytotoxicity.

We believe that the FACT platform conveys several distinct advantages and flexibility in the development of our ADC candidates, including the following:

- **Improved anti-tumor activity in preclinical models with optimized conjugation sites for linker-payload combinations**. The FACT platform is designed to select for optimal conjugation sites that are specific to each linker-payload combination. We employ site-specific conjugation techniques to conserved regions found within the antibody backbones that do not affect antigen binding or other normal antibody functional properties, such as Fc binding when appropriate, which we believe makes our conjugation technology broadly applicable to a wide variety of IgG monoclonal antibodies. Leveraging our diverse toolkit of improved and novel payloads, cleavable and non-cleavable linkers, and deep understanding of optimized site-specific conjugation sites, we have developed payload and linker combinations that can readily be applied to other antibodies in the same class. For example, our auristatin analogues, a potent microtubule inhibitor, and CPI, a highly potent DNA-cross-linking agent, have site-specific conjugation engineering with several linkers alongside IgG1 antibodies. These payloads and linkers could be readily applied to other IgG1 antibodies to efficiently develop novel product candidates.
- **Potential for improved therapeutic index and ADC stability**. We believe that our site-specific conjugation technology has potential to mitigate off-target liabilities of ADCs contributing to an enhanced plasma stability and enhanced therapeutic index. As shown in Figure 8 and 9, applying the FACT platform to a well-established antibody, NG-HER2-ADC, to generate a model ADC was observed to mitigate toxicity and increase the TI and PK exposure and half-life of the ADC *in vivo*. The rate of linker cleavage and release of the linker/payload construct has been observed to be heavily dependent on the conjugation location and we optimize our linkers for both specific targets and payloads. As a result, we believe the FACT platform and our empirical understanding of optimal site-specific conjugation may allow us to generate candidates against a broad set of targets that result in superior cell killing.

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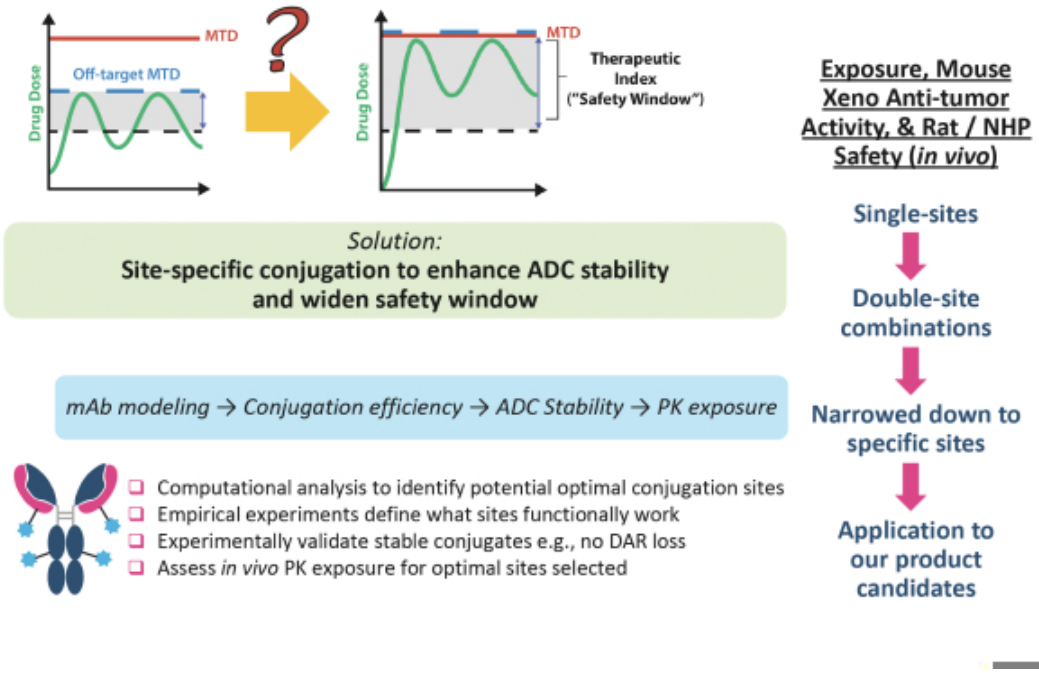
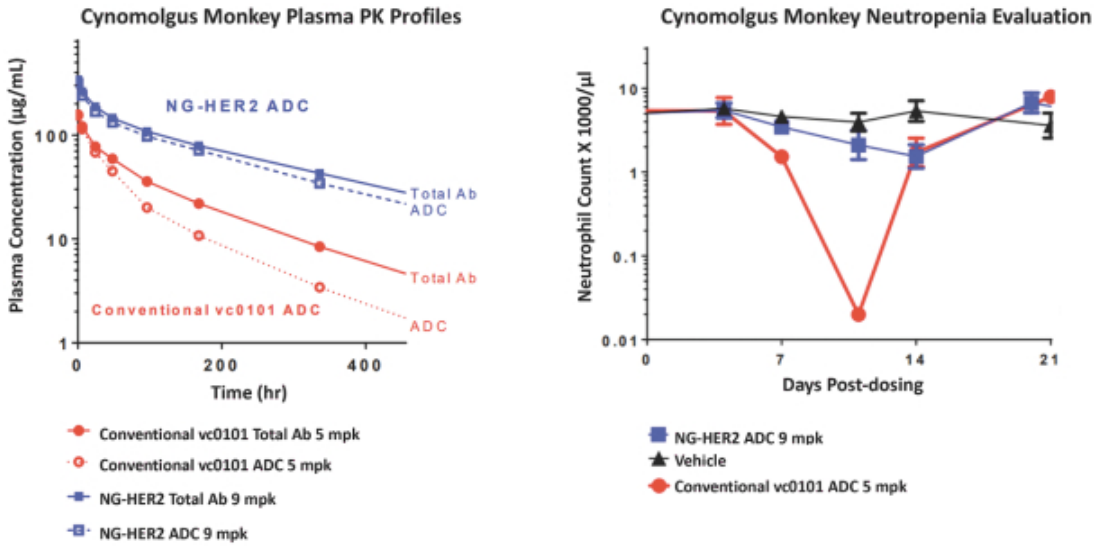
Figure 8



Schematic illustration of how the therapeutic index of a model ADC generated using the FACT platform can potentially mitigate toxicity while maximizing PK exposure in vivo (NHP: non-human primates)

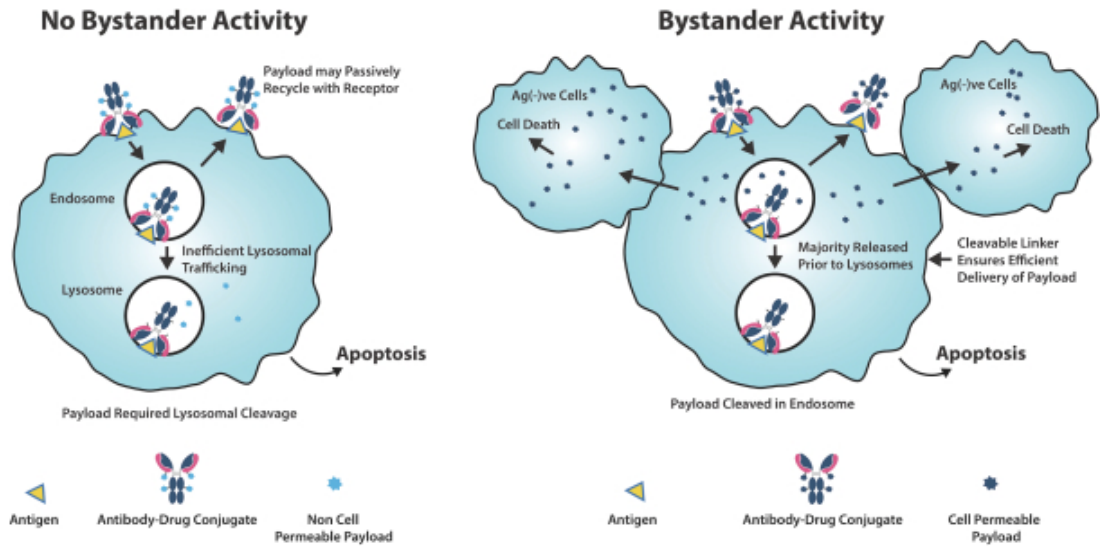
Figure 9



Comparison of stability and exposure in cynomolgus monkeys of Pfizer's NG-HER2-ADC using the same linker-payload and conjugation site chemistry as our PYX-201 ADC was observed to improve the stability and tolerability over conventional ADCs conjugated with the same linker-payload in preclinical studies (NG: next generation).

- **Enhanced anti-tumor activity through bystander activity**. As depicted in Figure 10 below, bystander activity occurs when payloads that are delivered to target cells diffuse into and kill neighboring cells in the tumor microenvironment and is of particular importance if the target is not uniformly expressed on all tumor cells. Bystander activity also has the potential to overcome resistance that may occur over time to treatment with ADCs, carrying non-bystander active payloads, as anti-tumor activity is not directly tied to antigen expression at the target site and destruction of a single target cell. We believe our toolkit of novel and validated payloads, linkers and site-specific conjugation techniques will allow us to further develop ADC candidates with bystander activity that may result in greater clinical activity, especially in cases with heterogeneous target expression.

Figure 10



The following table summarizes the potential advantages of our next-generation ADC platform that utilizes preclinically optimized payloads and site-specific conjugation compared to the currently approved ADCs using conventional conjugation:

	Pyxis Next-Generation ADCs	Conventional ADCs
Potential Therapeutic Index	• 8 – 16	• 1 – 5
Linker	• Site-specific conjugated linkers designed to result in homogenous DAR and high therapeutic index • Highly stable linkers designed to prevent premature release of payload	• Non site-specific conjugation results in heterogenous DAR • Many linkers are labile, resulting in premature release of payload and systemic toxicity
Payload	• Extensive array of payloads available to match tumor biology for optimal tumor killing • Payloads include microtubule inhibitors and DNA damaging agents whose potential mechanism of action has been shown to induce immunogenic cell death in preclinical models for combination with immunotherapy	• Due to the labile nature of linkers, some conventional ADCs are built with less potent payloads

Our ADC Product Candidates

PYX-201: Site-Specific Investigational ADC Targeting Onco-Fetal Fibronectin EDB

Overview

Our ADC PYX-201 is an investigational human IgG1 isotype site-specifically conjugated with an auristatin toxin targeting EDB that we plan to initially develop for the treatment of non-small cell lung cancer, or NSCLC,

breast cancer and other solid tumors. We licensed worldwide rights to PYX-201, built on the FACT platform, from Pfizer. We expect to submit an IND by mid-2022.

Non-Small Cell Lung Cancer Overview

NSCLC is a highly prevalent cancer with over 200,000 newly diagnosed patients per year in the United States representing 80-85% of lung cancers and remains the most common cause of cancer related deaths worldwide. Although surgery is potentially curative in stage one NSCLC, 35-55% of those patients will have a recurrence of their cancer. In addition, roughly 50% of lung cancers are metastatic at diagnosis, and 20-24% are locally advanced.

The treatment paradigm for metastatic NSCLC has shifted dramatically with the introduction of targeted therapies addressing druggable driver mutations, such as tyrosine kinase inhibitors, and immunotherapies such as PD-(L)1 checkpoint therapies. However, despite the initial success, resistance to targeted and immunotherapies almost invariably develops and ultimately, chemotherapy becomes the best available option. The five year survival rate of metastatic NSCLC patients remains only at 7% and effective treatment options beyond frontline therapy are needed for this patient population.

Breast Cancer Overview

Breast cancer has an incidence of over 250,000 annually in the United States. Approximately 20-30% of all breast cancer patients will develop metastatic disease, and the five year survival is less than 30%. The spectrum of breast cancers includes various clinical subtypes based on expression of certain hormone receptors, or HR, such as estrogen receptors, or ER, and progesterone receptors, or PR, or human epidermal growth factor receptor 2, or HER2. Triple negative breast cancer is a clinical subtype where there is no expression of the identified proteins. The current treatment paradigm still exhibits high unmet need for more effective treatment options.

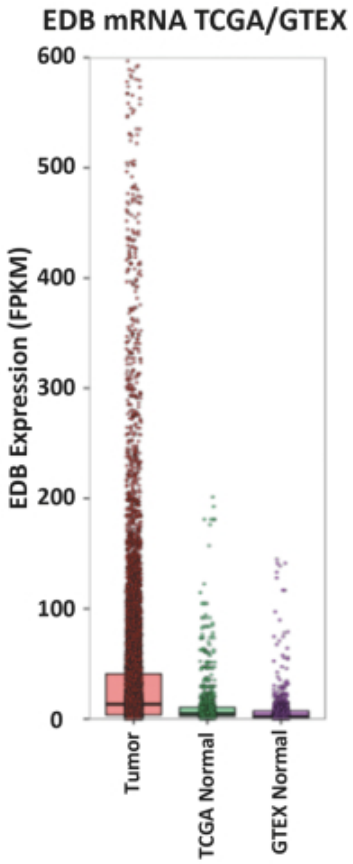
Rationale for Targeting EDB and Mechanism of Action for PYX-201

Fibronectin is a component of the extracellular matrix and its downstream signaling pathways regulate cell adhesion, migration, differentiation, and wound healing. EDB is an alternatively spliced form of fibronectin, which occurs when RNA is re-arranged to produce multiple variants of the same protein. EDB is typically only spliced during embryogenesis and is rarely found in healthy adult tissues. However, cancer cells take advantage of EBD’s ability to promote neovasculature structures, which are critical to feeding and supporting the uncontrolled growth of a tumor.

EDB is overexpressed in a variety of cancers, including, but not limited to, cancers of the lung, breast, ovary, pancreas, head and neck, thyroid, and brain (Figure 11). *In vitro* studies have shown that down regulation of EDB resulted in a significant reduction in cancer motility. Furthermore, EDB expression is maintained in distal metastasis in human cancer. EDB meets our criteria of a highly desirable ADC target due to its strict preferential expression in tumor tissue and its role as a driver of the poor prognosis in many cancers. Our primary lead indications, NSCLC and breast cancer, were chosen on the basis of unmet need, preclinical data generated, and the well-characterized role EDB plays in these tumors’ pathology.

Figure 11

Tumor Type	% Moderate or High (IHC)
Lung Tumors	100
Breast Tumors	92
Ovarian Tumors	83
Head & Neck Tumors	80
Pancreatic Tumors	79



EDB is highly expressed in a variety of solid tumors with restricted normal tissue expression (IHC: Immunohistochemistry; mRNA: Messenger RNA; TCGA: The Cancer Genome Atlas portal; GTEX:Genotype-Tissue Expression portal).

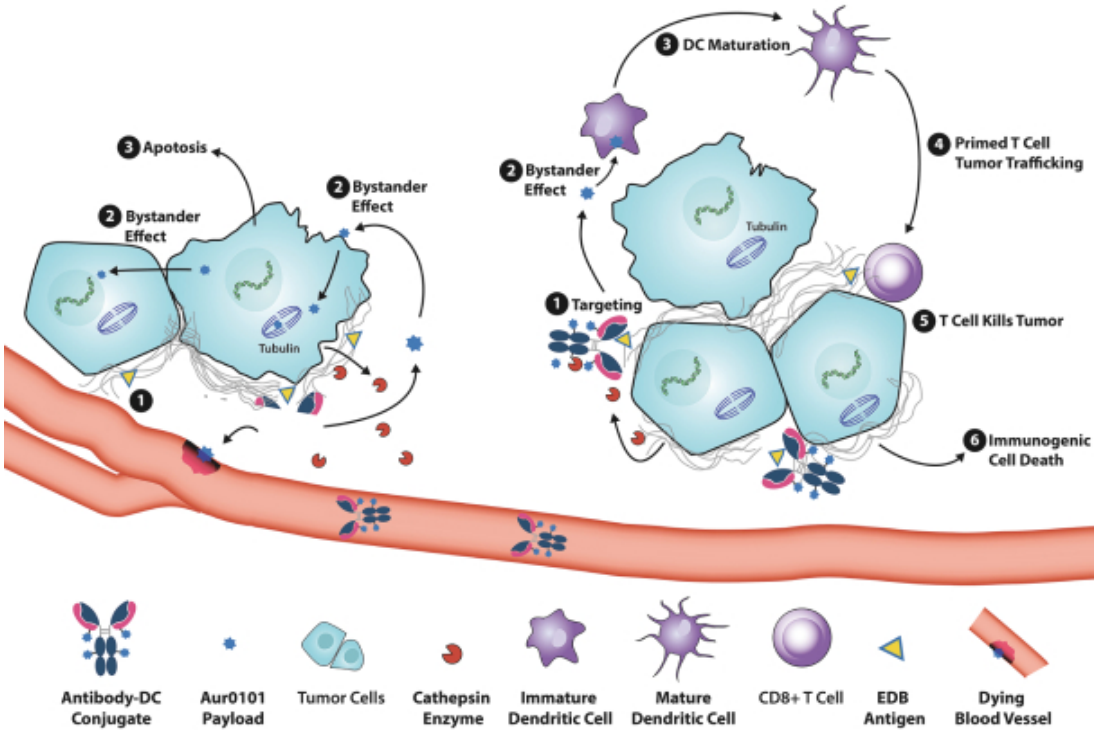
PYX-201 was developed using the FACT platform to produce an ADC designed to be highly stable and have a consistent DAR of four. The complementarity-determining regions, or CDRs, of the EBD antibody used in PYX-201, which is the part of the antibody responsible for binding to EDB, is well characterized and has been tested clinically in the form of a radio-conjugated antibody for tumor imaging – demonstrating a high degree of tumor-directed specificity. Furthermore, PYX-201 is designed to optimize linker stability to enable delivery of the auristatin payload without internalization of the ADC into the cancer cell. Unlike currently approved ADCs which bind to the tumor cell surface, PYX-201 is designed to deliver the auristatin payload to the TME consisting of tumor cells, stromal cells and the surrounding blood vessels. PYX-201 is designed to exhibit anti-tumor activity through three distinct modes of action, as illustrated in Figure 12 below:

1. **Direct killing activity**: After binding to EDB locally expressed in the TME, cathepsin B, a protease which is aberrantly overexpressed in and secreted by invasive and metastatic cancers, cleaves the linker enabling the cell-permeable auristatin toxin to kill both the tumor and stromal cells, which play a key role in maintaining the TME. PYX-201 is designed to attack the tumor and the stromal cells, and thus may remodel the TME and may enhance T cell activity.

2. **Bystander effect**: Releasing the payload extracellularly within the TME may also confer added cytotoxicity via bystander activity, which may enable killing of cancer cells that do not express EDB.
3. **Immunogenic cell death**: Lastly, auristatin has been shown in preclinical models to drive immunogenic cell death by promoting dendritic cell maturation, activation, and migration and by causing the release of tumor antigens and damage-associated molecular patterns, or DAMPs, which together initiate an adaptive immune response.

Taken together, we believe that PYX-201 may potentially generate a multi- pronged attack on difficult-to-treat cancers by directly killing cancer cells, modulating the TME, and mobilizing an anti-tumor immune response.

Figure 12



PYX-201 is designed to bind Fibronectin EDB in the surrounding stroma to kill tumor cells and the supporting infrastructure through direct payload-induced cell death, bystander effect and triggering immunogenic cell death based on data from preclinical models

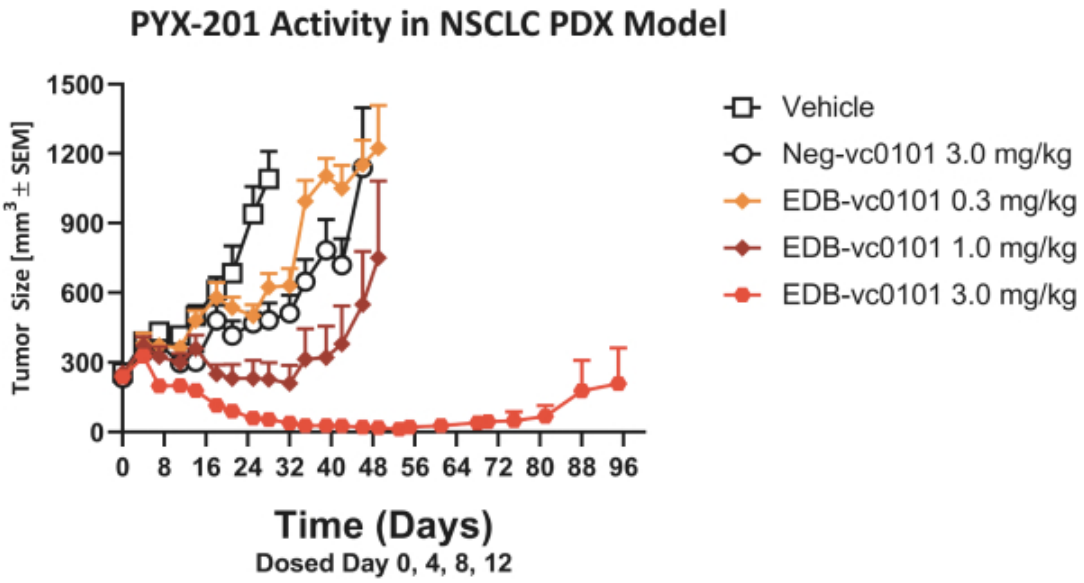
Preclinical Data

PYX-201 has shown promising preclinical results. In preclinical studies, we have observed strong *in-vivo* activity in NSCLC PDX and in the EMT-6 syngeneic mouse breast cancer models. While PDX mouse models are generated by grafting patient derived cells to immune deficient mice, syngeneic mouse models are grafted with tumors derived from mice which allow the immune system to remain intact. As a result, while PDX models

provide the most clinically translatable signals of efficacy in a preclinical setting, syngeneic models allow us to assess the ability of PYX- 201 to generate an immune response. In these syngeneic models, we have been able to show that PYX-201 effectively localizes to cancers and can generate not only significant reductions in tumor burden but can also mobilize an anti-tumor immune response.

In a PDX model of NSCLC, PYX-201 was intravenously administered four days apart for twelve days and a dose-dependent regression in tumor burden and a durable response at 3 mg/kg was observed (Figure 13).

Figure 13



PYX-201 has been shown to be highly active in a PDX model of NSCLC.

The anti-EDB human mAb used in PYX-201 is cross-reactive with mouse EDB-fibronectin. As a result, in syngeneic tumor models conducted in immune competent mice, PYX-201 achieved a durable response with a single dose of 9 mg/kg (Figure 14). In preclinical studies, we observed increased infiltration in CD3 T cells and upregulation of PD-L1 which suggests that PYX-201 may be capable of inducing immunogenic cell death. Combining sub-optimal doses of PYX-201 with checkpoint therapy resulted in synergistic inhibition of tumor growth in the EMT-6 model. Consequently, we believe PYX-201 may synergize with checkpoint inhibitors, as shown in Figure 15. PYX-201 was also well-tolerated in our mouse models and toxicology studies conducted in rat and cynomolgus monkeys. In an exploratory toxicology study in cynomolgus monkeys the HNSTD was found to be greater than 12 mg/kg with three doses of PYX-201 administered every three weeks. There was no differential in body weight or food consumption detected, and based on the types of toxicities observed (i.e., no fibrosis, neuropathology etc.), all toxicities are reversible, or are expected to be reversible. PYX-201 was observed to have a preclinical relevant therapeutic index of 16 (the HNSTD in monkeys was 144 mg/m^2 and was 16 times greater than the dose required for a complete response in mice of 9 mg/m^2), which we believe is promising based on our experience investigating the relative therapeutic index among different ADC constructs.

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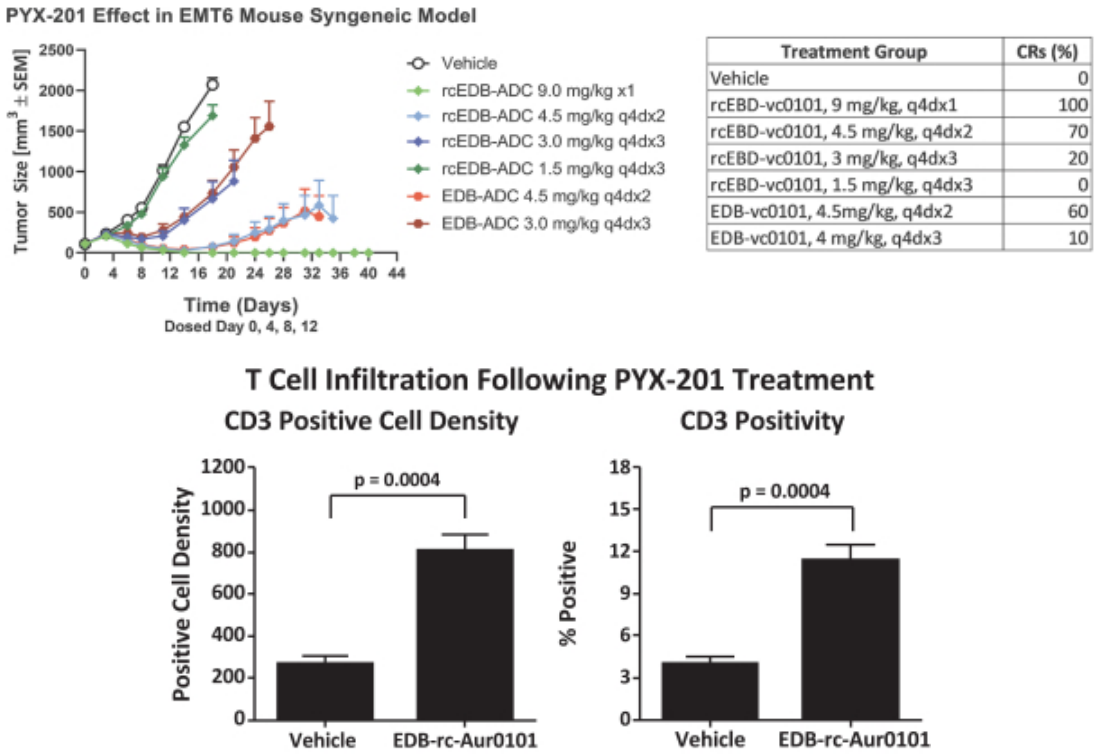
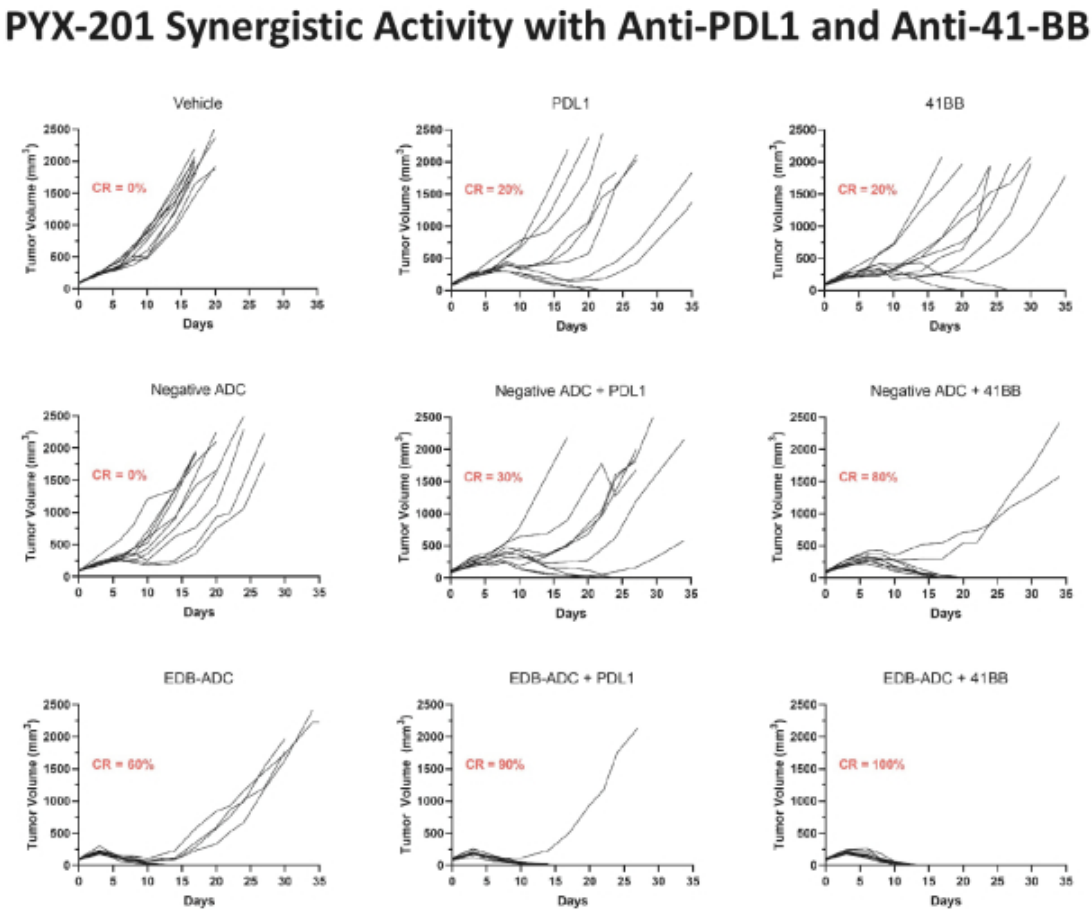
Figure 14



Treatment Group	CRs (%)
Vehicle	0
rcEBD-vc0101, 9 mg/kg, q4dx1	100
rcEBD-vc0101, 4.5 mg/kg, q4dx2	70
rcEBD-vc0101, 3 mg/kg, q4dx3	20
rcEBD-vc0101, 1.5 mg/kg, q4dx3	0
EDB-vc0101, 4.5mg/kg, q4dx2	60
EDB-vc0101, 4 mg/kg, q4dx3	10

PYX-201 treatment in vivo of syngeneic cell-derived tumor models has been associated with enhanced T cell infiltration based on increased CD3 positivity. (CR: complete response; rcEDB: Reverse Chimeric EDB)

Figure 15



EDB vc0101 ADC combines with anti-PD-L1 and anti-41-BB to synergistically reduce tumor growth in EMT6 mouse syngeneic model

Clinical Development Plan

We plan to submit an IND by mid-2022. Subject to the FDA's acceptance, we plan to conduct a Phase 1/2 dose escalation/expansion trial consistent with other Phase 1/2 clinical trial models for solid tumors. Initially, we plan to enroll NSCLC and breast cancer patients and patients with other tumor types with a high frequency of EDB expression to identify a recommended dose for separate expansion cohorts in tumor types that demonstrated activity in dose escalation. We may pursue the development of PYX-201 as a combination therapy with the standard of care as appropriate in future studies. For example, in NSCLC and breast cancer, where immunotherapy is widely used in both first and second-line settings, PYX-201 may provide a synergistic treatment benefit since the auristatin payload has been observed in preclinical studies to trigger hallmarks of immunogenic cell death.

PYX-202: Rationally Designed, Site-Specific, Investigational ADC Targeting Delta Like Non-Canonical Notch Ligand 1

Overview

Our ADC PYX-202 is an investigational novel ADC consisting of an IgG1 anti-Delta-like 1 homolog, or DLK1, mAb conjugated to MMAE via a site-specific plasma- stable ß-glucuronide linker. Our development plan is initially targeted at the treatment of SCLC, soft tissue sarcoma, or STS, and other solid tumors. We licensed worldwide rights to PYX-202, excluding South Korea, from LegoChem. See "—Licensing and Collaboration Agreements." We expect to submit an IND by mid-2022.

Small Cell Lung Cancer Overview

Approximately 30,000 SCLC patients are diagnosed per year in the United States, representing approximately 15% of all lung cancers, with over 90% of patients having locally advanced or metastatic disease at diagnosis. Complete remissions are rare as 75-80% of patients relapse within two years, and response rates in the second-line setting have typically been between 14-30%. Over half of diagnosed patients are expected to require two or more lines of therapy. The five year survival rates are dismal at only 6%. The median overall survival for patients with extensive-stage SCLC is reported to be 8-13 months from the time of diagnosis. In the current first line treatment, patients receive either chemo and radiation therapy or chemotherapy with checkpoint inhibition. Beyond progression, lurbinectedin and topotecan are standard treatment options used in the second/third line setting and only offer a median survival of four to five months. Effective therapy in this patient population represents high unmet need.

Soft Tissue Sarcoma Overview

In 2020, approximately 13,000 patients were diagnosed with soft tissue sarcoma in the United States, of which about 10% and 40% of patients will either initially present or develop metastatic disease, respectively. Patients with metastatic disease have a poor overall survival ranging from 12-18 months – less than 20% of patients are alive after two years. The current standard of care treatment for metastatic patients is typically a combination of doxorubicin as a monotherapy or in combination with ifosfamide and the median overall survival is approximately 12-14 months. There are limited treatment options beyond chemotherapy medicines, therefore there is significant unmet need for alternative therapeutic options.

Rationale for Targeting DLK1 and Mechanism of Action for PYX-202

DLK1 is a transmembrane protein that is implicated in non-canonical Notch signaling, a pathway that supports the proliferation, differentiation, and survival of tumor cells. DLK1 plays a key role during fetal development and is involved in the terminal differentiation of the fat, muscle, liver, and pituitary gland, and furthers epithelial branching in the lung and pancreas. DLK1 is absent in most tissues at birth, and in adults, its expression is limited in low amounts to the adrenal and pituitary glands, pancreas, ovary, endometrium, and testis. In certain tumor types, DLK1 is significantly upregulated and has been shown to promote invasion and support the maintenance of cancer stem cells, a subset of cells that has been linked to drug resistance and relapse (Figure 16). In addition to SCLC and STS, DLK1 is also known to be overexpressed in AML and tumors of neuroendocrine origin such as neuroblastoma and rhabdomyosarcoma.

Figure 16

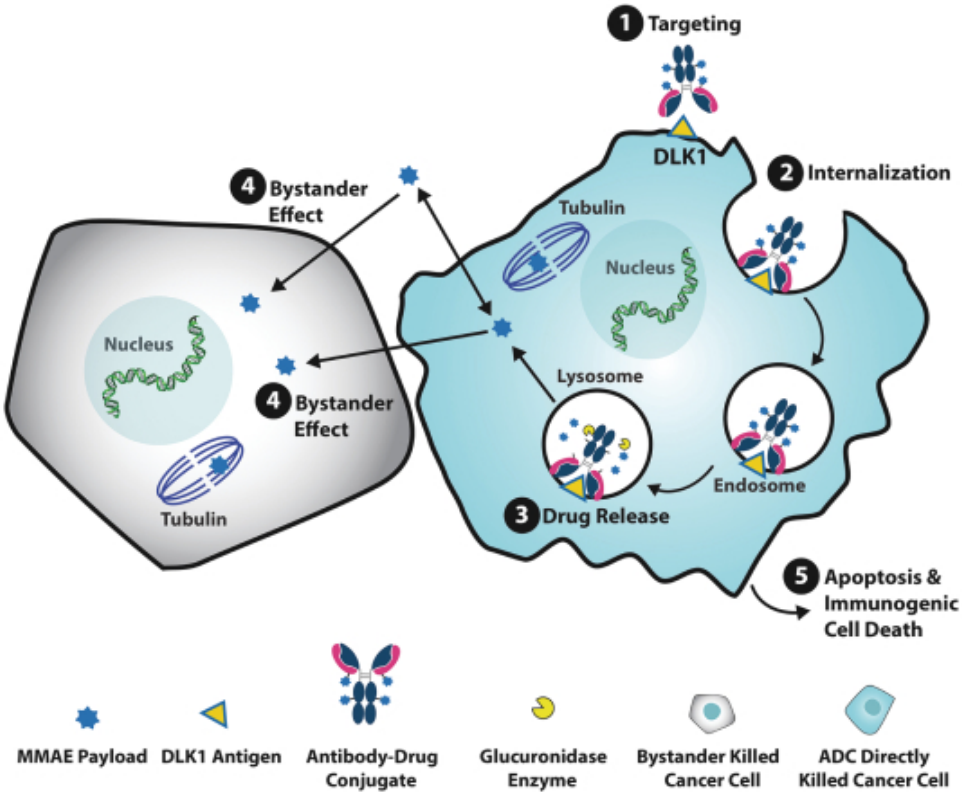
DLK1 Expression in Various Tumors by IHC

Tumor		DLK1 (-)ve	DLK1 (+)ve	Total
Colon Andenocarcinoma		24 (41.4%)	34 (58.6%)	58
Ovarian Carcinoma		59 (86.8%)	9 (13.2%)	68
Pancreatic Carcinoma	Duct Andenocarcinoma	33 (71.7%)	13 (28.3%)	46
	Islet Cell Carcinoma	3 (50%)	3 (50%)	6
Breast Carcinoma		36 (61.0%)	23 (39.0%)	59
Lung Carcinoma	NSCLC	51 (91.1%)	5 (8.9%)	56
	SCLC	19 (47.5%)	21 (52.5%)	30

DLK1 expression was determined by IHC, with DLK1 positive tumors containing more than 10% immunopositive stained cells (either cell membrane or cytoplasmic staining). Source: Yanai H, et al., J Biochem. 2010; 148(1):85.

Due to preferential expression and as a driver of a poor prognosis in many cancers, DLK1 meets the requirements of an ADC target. Our primary lead indications, SCLC and STS, were chosen on the basis of multiple factors including unmet need, preclinical data generated, and the well-characterized role DLK1 plays in its disease pathology.

Figure 17



PYX-202 is designed to be rapidly internalized and the MMAE payload cleaved by glucuronidase within the lysosome to target tubulin and induce tumor cell death. Additionally, bystander effect may augment tumor cell killing by targeting neighboring tumor cells.

PYX-202 is designed to rely upon a tumor-selected beta-glucuronide linker with great plasma stability to deliver a MMAE payload and to limit off-target toxicities. MMAE auristatin is a well-characterized tubulin inhibitor which is currently used in FDA-licensed ADCs such as brentuximab vedotin, polatuzumab vedotin-piiq, and enfortumab vedotin-ejfv. PYX-202 exhibits anti-tumor activity through five distinct modes of action, as illustrated in Figure 17 above:

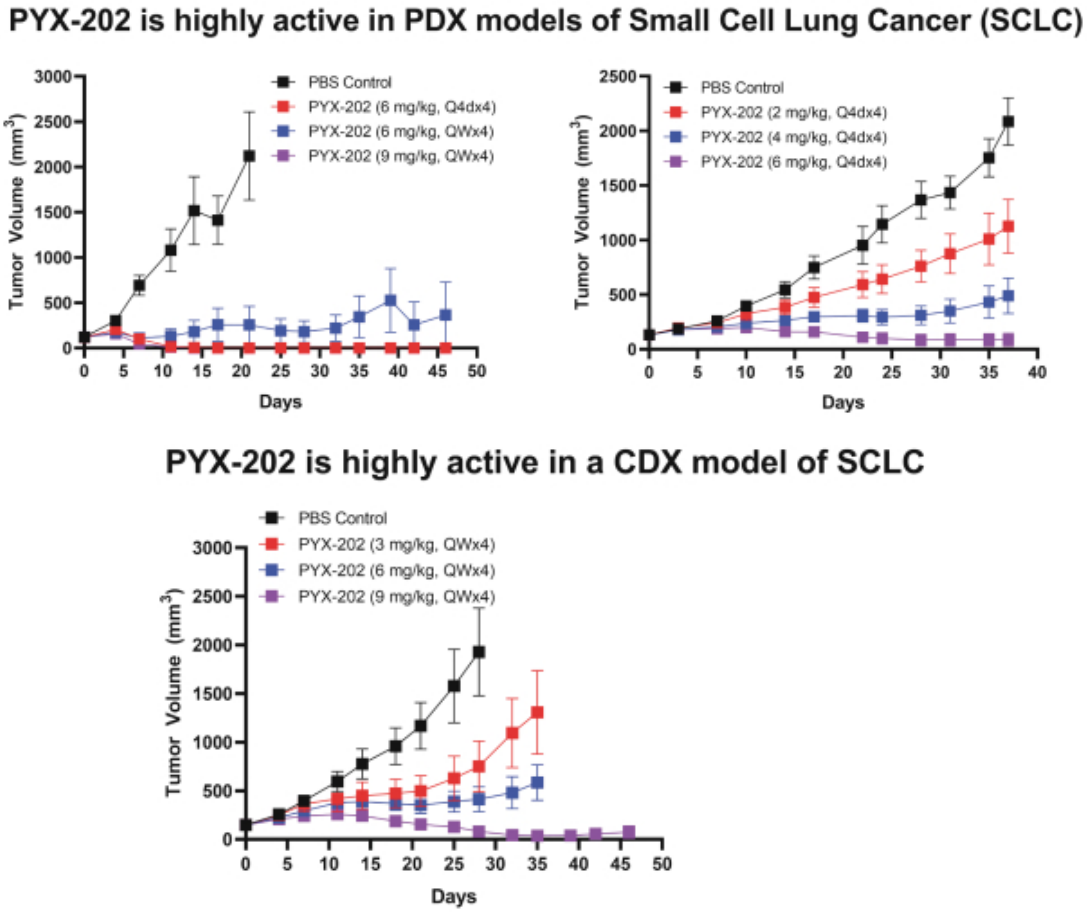
1. **Targeting**: PYX-201 consists of an IgG1 anti-DLK1 designed to enable efficient binding to DLK1 molecules expressed on tumor cell surface.
2. **Internalization**: This approach also utilizes a plasma- stable ß-glucuronide linker designed to efficiently release the MMAE within the cancer cell.
3. **Drug release**: The payload is designed to be released when PYX-202 interacts with ß-glucuronidase, an enzyme readily present in lysosomes, after internalization into the cancer cell.
4. **Bystander effect**: Target cell secreting the payload extracellularly within the TME may also confer added cytotoxicity via bystander activity, which may enable killing of cancer cells that do not express DLK1.
5. **Apoptosis and Immunogenic cell death**: MMAE, like other derivatives of auristatins, potentially induces immunogenic cell death by promoting the maturation and activation of dendritic cells based on preclinical studies.

In addition, our novel approach employs a site-specific conjugation of a well-studied tubulin inhibitor for enhanced ADC stability achieving a homogenous DAR of 4 and improved construct stability. Taken together, we believe that PYX-202 has the potential to generate a multi- pronged attack on difficult-to-treat cancers by directly killing cancer cells or via the bystander effect, and mobilizing an anti-tumor immune response.

Preclinical Data

PYX-202 has shown promising *in vivo* activity in immune-deficient mice engrafted with patient-derived SCLC tumors. In these PDX models, PYX-202 was intravenously administered every four days for 12 days and caused significant decrease in tumor volume at doses as low as 2 mg/kg and durable regression at 6 and when dosed once a week for four weeks at 9 mg/kg in some mice. In addition, treatment with PYX-202 resulted in durable regressions in the NCI-H69 CDX model (Figure 18).

Figure 18



Activity of PYX-202 was highly active in PDX and cell-derived xenograft models of SCLC.

The anti-DLK1 human mAb used in PYX-202 is cross-reactive with mouse and cynomolgous DLK1. PYX-202 also showed promising results in our mouse models and toxicology studies conducted in rat and cynomolgus monkeys. In an exploratory toxicology study in cynomolgus monkeys the HNSTD was found to be equal to or greater than 12 mg/kg with a single dose of PYX-202 administered. No findings for body weight, body temperature, food consumption, serum chemistry, or histology were found after a single 12 mg/kg dose. PYX-202 has a preclinical relative therapeutic index of eight (the HNSTD in monkeys is 144 mg/m^2 is eight times greater than the dose required in mice of 18 mg/m^2 (the equivalent of 6mpk)), which, based on our experience investigating the relative therapeutic index among different ADC constructs, we believe is promising. Moreover, we believe that this site-specific conjugation and the rationally designed linker may reduce off-tumor effects due to the improved stability conferred by our ADC design. Based on the magnitude of cytotoxic impact and the high safety thresholds established in non-human primates, we believe PYX-202 has the potential to mitigate premature payload release in the periphery and successfully deliver the payload to the site of the cancer while reducing off-target toxicity.

Clinical Development Plan

We plan to submit an IND by mid-2022. Subject to the FDA's acceptance, we plan to conduct a Phase 1/2 dose escalation trial consistent with other Phase 1/2 clinical trial models for solid tumors. Initially, we plan to enroll patients with SCLC, STS and other tumor types with a high frequency of DLK1 expression to identify a recommended dose for separate expansion cohorts in tumor types that demonstrated activity in dose escalation. We may pursue combination therapy with the standard of care as appropriate in future studies of PYX-202. For example, in SCLC, where immunotherapy is widely used in both first and second-line settings, we believe PYX-202 may provide a synergistic treatment benefit since the auristatin payload has been observed to trigger hallmarks of immunogenic cell death in preclinical studies.

PYX-203: Rationally Designed, Investigational, Site-Specific ADC Targeting CD123

Overview

Our ADC, PYX-203, is an investigational human IgG1 isotype mAb targeting CD123 that is site-specifically conjugated to the DNA cross linking toxin CPI dimer that we plan to develop for the treatment of AML and other blood cancers. CD123 is a cell surface antigen widely expressed in AML, including on leukemic stem cells. We licensed worldwide rights to PYX-203 built on the FACT platform. We expect to submit an IND by 2023.

Acute Myeloid Leukemia Overview

Approximately 20,000 AML patients are diagnosed per year in the United States, accounting for approximately 1% of all new cancer cases in the United States. AML is a heterogenous disease that originates from hematopoietic stem cells within the bone marrow and is treated with conventional induction therapy via cytarabine and anthracycline chemotherapeutics that result in complete remission in 60-80% of cases. Despite a high remission rate after initial treatment, approximately 50-70% patients experience a relapse. The five year overall survival remains low at approximately 29%, and there is a significant unmet need for patients who relapse after successful first-line treatment or become refractory and resistant to current treatments.

Myeloid Dysplastic Syndrome, or MDSW

MDS is a group of disorders characterized by peripheral cytopenia, dysplastic hematopoietic progenitors, a hypercellular or hypocellular bone marrow and a high risk of conversion to AML. Distinct mutations of stem cells are found most frequently in genes involving RNA splicing. It most commonly affects the elderly and up to 20,000 new cases are diagnosed each year in the United States. Symptoms tend to reflect the most affected cell line and may include pallor, weakness and fatigue, fever and infection, bruising and bleeding. Prognosis depends greatly on the exact classification and on any associated disorders. The Revised International Prognostic Scoring

System predicts the outcome using cytogenetics, percentage of marrow blasts and degree of cytopenia as risk factors. Patients in the lowest risk category have a median survival of about 8 years whereas those in the highest risk category have a median survival of less than 1 year. Treatment includes symptomatic management, chemotherapy with azacitidine, decitabine or lenalidomide. The one curative therapy is allogeneic stem cell transplant which can only be used in younger medically fit patients. Given the poor outcomes with current treatment there is a large unmet need for novel well tolerated therapies.

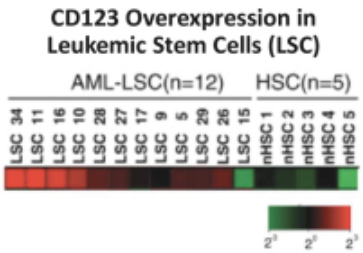
Rationale for Targeting CD123 and Mechanism of Action for PYX-203

CD123, also known as interleukin-3 receptor alpha, or IL-3Ra, is a cell surface antigen that is widely overexpressed on leukemic stem cells, or LSCs, and leukemic blasts in various hematological malignancies, including AML, hairy cell leukemia, Hodgkin lymphoma, and blastic plasmacytoid dendritic neoplasm, or BPDCN. Multiple studies have demonstrated that CD123 expression is significantly lower in normal myeloid progenitors and that high levels of CD123 expression may be associated with worse clinical outcomes and overall survival. Taken together, CD123 is an attractive oncology target that has been exploited by multiple therapeutic modalities, including bispecific antibodies, CAR-T therapies, and other ADCs. In 2018, the FDA approved tagraxofusp-erzs for BPDCN, making it the first ever CD123 targeted agent approved for any indication. Our primary lead indication in AML was chosen based on unmet need, preclinical data generated, and the well-characterized role CD123 overexpression plays in the disease pathology.

Figure 19

CD123 is widely expressed on AML Cells

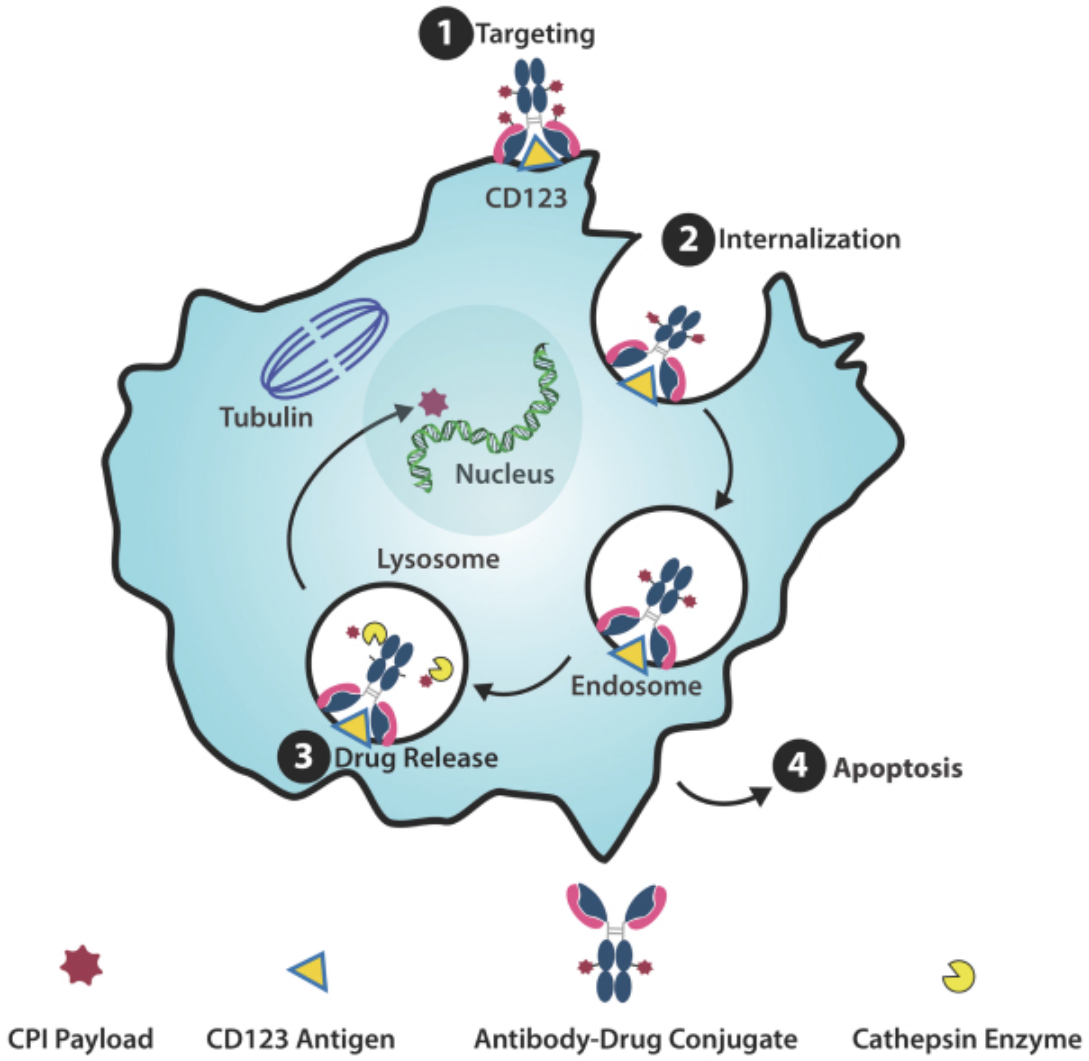
CD123+ AML Samples	Reference
100%	Internal Data
100%	Loghavi et al., 2014
98%	Munoz et al., 2001
95%	Jordan et al., 2000
80%	Ehninger et al., 2014



CD123 is highly expressed on AML cells, including leukemic stem cells, or LSC, with limited expression on hematopoietic stem cells, or HSC.

PYX-203 leverages site-specific conjugation through the FACT platform with the goal of achieving a homogenous DAR of 2 and high construct stability. PYX-203 uses a plasma-stable, cleavable linker with a novel CPI dimer payload designed to alkylate and crosslink DNA to activate multiple DNA damage pathways. In our *in vitro* cell line models, we have observed that our CPI dimer payload overcame multi-drug resistance, or MDR, and effectively killed cell lines resistant to either cytarabine or calicheamicin which is the payload used in gemtuzumab ozogamicin (Pfizer, Inc.), an FDA approved ADC for AML. The mutations introduced for site-specific conjugation also eliminate the N297 glycation site. Absence of antibody glycation eliminates binding to FC gamma receptors, or FcgRs, and consequently may reduce non-specific uptake of the ADC into FcgR expressing immune cells.

Figure 20

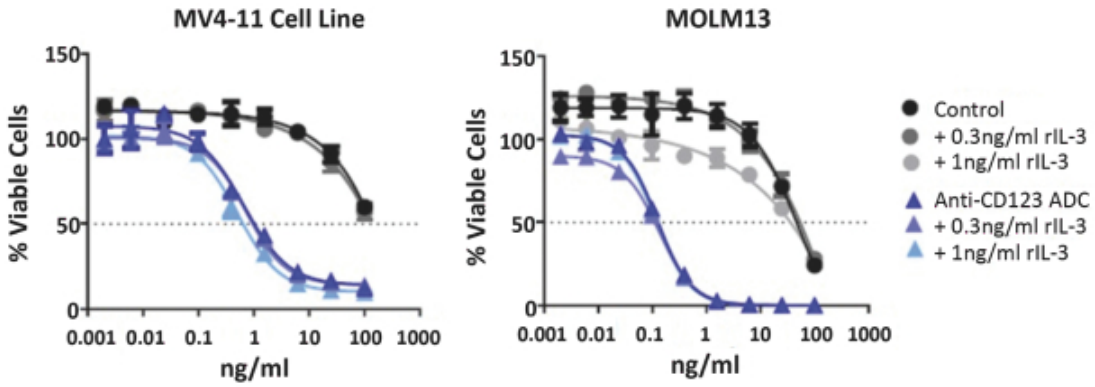


PYX-203 is designed to delivers a highly potent DNA-damaging payload (CPI) to kill CD123 expressing cells. The ADC 1) is designed to targets CD123 expressing cells and upon binding to the target 2) is designed to be internalized by AML cells, where 3) the CPI payload is to be cleaved by cathepsin B proteases within the lysosome and cross-link DNA to 4) induce tumor cell death.

Preclinical Data

We have extensively tested PYX-203 in a variety of *in vitro* and *in vivo* preclinical studies. Dose-dependent cytotoxicity of PYX-203 was observed in CD123+ MOLM13 and MV4-11 AML cell lines and PYX-203 did not exhibit cytotoxicity against CD123-negative cell lines (Figure 21). In addition, data from those studies did not show that the cytotoxicity of PYX-203 was not affected by the presence of recombinant human IL-3, which binds CD123 endogenously to transmit IL-3 signals, thereby suggesting that IL-3 may not compete with PYX-203 at the CD123 target site.

Figure 21



In vitro cytotoxicity assay of PYX-203 in MV4-11 and MOLM-13 cells in the absence or presence of recombinant human IL-3 (rIL-3), which showed IL-3 did not affect PYX-203 specificity or cytotoxicity. Viability was measured by Cell titre Glo (CTG) luminescent cell viability assay kit.

In addition to *in vitro* cytotoxicity, significant anti-tumor activity of PYX-203 has been observed preclinically as measured by the reduction in the frequency of the leukemic cells in the blood and bone marrow in nine disseminated AML PDX mouse models which were selected to represent the broad heterogeneity of AML cytogenetic profiles, molecular abnormalities, and disease stages observed clinically. PYX-203 doses of 0.1 and 0.03 mg/kg were associated with significant anti-tumor activity across this range of samples from subsets of AML patients, suggesting PYX-203 may have the potential to treat a broad spectrum of the AML population (Figure 22).

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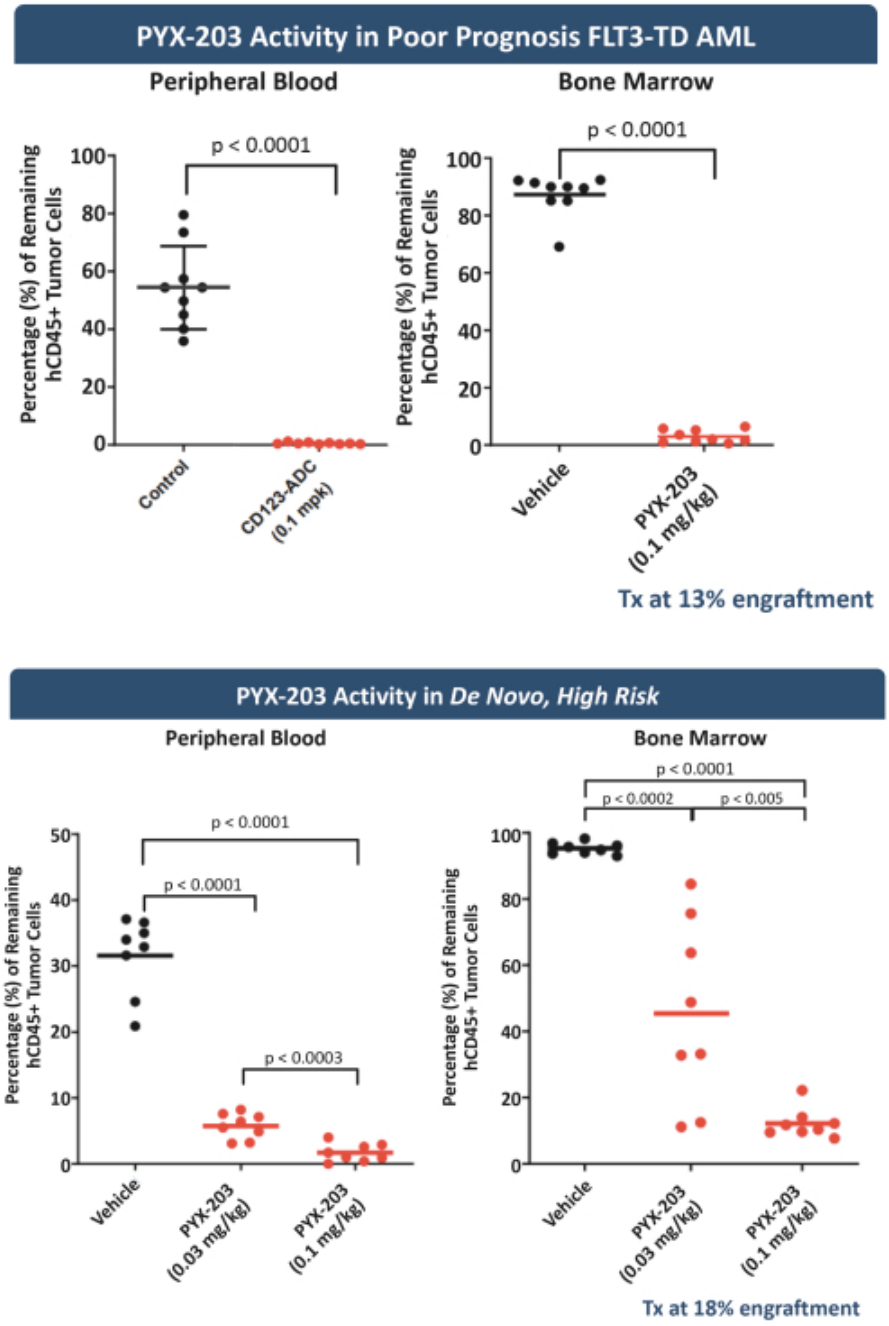
Figure 22



PYX-203 has demonstrated anti-tumor activity in a range of AML models in vivo

The anti-CD123 human mAb used in PYX-203 is cross-reactive with mouse and cynomolgous CD123. PYX-203 has exhibited favorable tolerability data in toxicology studies conducted in non-human primates with no adverse clinical signs. Moderate decreases of white blood cell counts at higher doses were observed in PYX-203 at doses up to 1 mg/kg in non-human primates. An improved therapeutic index for PYX-203 compared to a similarly prepared ADC conjugated to the pyrolobenzodiazepine, or PBD, or calicheamicin payloads (internal data) was also observed in preclinical single-dose data. PYX-203 had a preclinical relative therapeutic index of 8 (the HNSTD in monkeys was 12 mg/m2 which is eight times greater than the dose required for a complete response in mice of 1.5 mg/m2). In addition, these data, which are supported by the literature, shows that CD123 expression was restricted to specific cell types of peripheral blood and bone marrow cells in human and cynomolgus monkeys which we believe may translate to lower off-target toxicity in the clinic as compared to CD33, the target of gemtuzumab ozogamicin. PYX-203 was tested preclinically with three doses of 1 mg/kg and 3 mg/kg, with doses £1 mg/kg associated with minimal and non-adverse toxicity events. This corresponded to a TI of 8, with the bone marrow and esophagus identified as the organs of primary dose-limiting toxicity in cynomolgus monkeys.

Clinical Development Plan

We plan to submit an IND by 2023. Subject to the FDA's acceptance, we plan to conduct a Phase 1/2 dose escalation/expansion trial consistent with other Phase 1/2 clinical trial models for hematologic malignancies. Initially, we plan to enroll AML and with other hematologic malignancies with a high frequency of CD123 expression to identify a recommended dose for separate expansion cohorts in tumor types that demonstrated activity in dose escalation. To examine the potential benefit of PYX-203 in a broader range of patients in earlier stages of the disease, we may pursue combination therapy with the standard of care as appropriate in future studies.

Immuno-Oncology Programs and Target Catalog Overview

Background on Current Landscape

The advent of immuno-oncology therapeutics, particularly immune checkpoint inhibitors, has shifted the treatment paradigm for oncology. The immune system has the capability to recognize and eliminate cancer, but tumor cells take advantage of immune checkpoint pathways, which normally prevent autoimmunity, to suppress and evade immune effector cell activity. The first generation of drugs that interrupt these pathways, including PD-L(1) and cytotoxic T-lymphocyte associated protein 4, or CTLA-4, inhibitors, has generated significant enthusiasm due to their ability to achieve durable responses in some patients. While these drugs provide significant therapeutic benefit for durable responders, response rates remain low for most patients, particularly for tumors with low levels of T cells infiltrating the tumor. These non-inflamed (i.e., "cold") tumors can suppress the adaptive immune response through a variety of mechanisms within the TME.

Target Catalog Overview

We have a large proprietary target catalog that we have assembled through both our own discovery activities and through an exclusive license from the University of Chicago for the work on immunotherapy targets out of Dr. Thomas Gajewski's laboratory. We are also building a large "cold" tumor target discovery database leveraging several human tumor databases.

The target catalog is based upon findings from an in vivo mouse model system which examined tumor tissue for functional and dysfunctional T cells based on the ability of the T cells to produce the cytokine IL-2. Furthermore, since 4-1BB and LAG3 positive T cells do not secrete IL-2, the CD8+ T cells were sorted based on cell surface marker expression i.e., 4-1BB and LAG3, which further defined functional or dysfunctional T cells. Gene expression analysis identified upregulated cell surface molecules in dysfunctional cells which included well

established markers such as PD1, CTLA4, and TIM3, while many other novel targets were identified of which we have prioritized a select subset for discovery research based on bioinformatics and deep biological rationale.

Our cold tumor target discovery database used RNA-seq transcriptome analysis of human tumor databases to identify potential novel targets involved in regulation of T cell function and/or infiltration leading to cold tumors. We have supplemented this database with additional resources which we continue to mine to identify additional novel targets for immunomodulation. These cold tumor targets are potentially dominant immune suppressors that are expressed across a variety of tumor associated cells, including immune cells, tumors cells, and stroma, offering the potential to uncover not only novel IO mechanisms, but additional novel targets for our ADC platform.

Immuno-Oncology Programs Overview

We have initiated multiple monoclonal antibody programs that address critical immunomodulatory pathways within the TME and are exploring additional potential targets. Our programs address critically important tumor infiltrating immune cell populations, such as macrophages, T cells, and natural killer (NK) cells, which may play crucial roles in limiting tumor growth and metastasis. In addition to singling out specific cell types, we believe our IO programs also address mechanisms responsible for T cell exhaustion and the immunosuppressive effects of the TME on T and NK cells. These effects can occur due to chronic exposure to tumor antigens within the TME and direct exposure to immunosuppressive cytokines and other signaling molecules. Though PD-(L)1 therapies can help reinvigorate T cells, they are often not sufficient to overcome T cell exhaustion and many patients do not respond to standard checkpoint therapy. Several immunosuppressive pathways can also directly limit T cell activity and other critical components of the anti-tumor immune response, such as direct tumor killing by NK cells. Therapies that target both T cell and NK cells to counteract these pathways have the promise to restore immune effector function, either alone or in combination with checkpoint inhibitors. Furthermore, MDSCs/TAMs are another major component of the TME with significant immunosuppressive activity. These cells represent a mixed population of immature myeloid cells and are actively recruited to the TME where they broadly suppress immune activity. MDSCs and tumor-associated macrophages, or TAMs, support tumor growth by depriving other immune cells of key amino acids essential for immune function, producing signaling molecules that block immune effector function, and enhancing activation of regulatory T cells. Furthermore, MDSCs and TAMS promote tumor angiogenesis and growth and are a marker associated with poor outcomes and linked to poor response to PD-(L)1 therapy. We believe our IO programs represent potential novel therapies that have the potential to overcome multiple protumor mechanisms by enhancing T and NK cell activity, or by inhibiting immune suppressive functions of MDSCs and TAMs within the TME.

Forging Creative Business Models and Alliances

We continuously evaluate a robust set of business development opportunities to build alliances with partners. The set of opportunities include, but are not limited to, joint ventures, spin-offs, discovery partnerships and licenses. Furthermore, we intend to retain the optionality to explore the potential for creative business models.

The Alloy Pyxis JV

One such endeavor is the Alloy Pyxis JV, which is a 50:50 co-owned joint venture formed by us and Alloy Therapeutics, Inc., or Alloy, to accelerate the discovery and development of drugs to address cancer and autoimmune diseases.

We bring to the Alloy Pyxis JV targets from our target catalog and expertise in stromal and immune biology while Alloy contributes its ATX-Gx transgenic mouse and other discovery services which accelerate antibody drug discovery. Both provide FTEs and project execution and project oversight. Under the collaboration agreement, the parties will conduct research under a mutually agreed research plan for up to six research

programs focused on mutually selected targets. With this initial wave of targets, we retain an exclusive option to obtain an exclusive license to further develop and commercialize development candidates at our discretion.

Additional Discovery Efforts

We believe our broad expertise enables us to pioneer scientific scholarship in immune biology of the TME and beyond. We have a flexible pathway to do so via platform development, forging creative business models and alliance building, in-licensing and leveraging target catalogs to expand our portfolio of differentiated therapeutics for difficult-to-treat cancers. The realization of this vision will necessitate rapid innovation and operational excellence from a scientific and business perspective. As such, our mission is to take the next step towards creating an oncology company of the future — an oncology company unconstrained by conventional ideas and conventional practices, an oncology company that will rise to meet the many and complex challenges of difficult-to-treat cancers, and an oncology company that will have a significant impact on the lives of patients with limited effective treatment options.

Competition

The biotechnology and pharmaceutical industries, including the oncology subsector, are characterized by rapidly evolving technologies, intense competition, and a strong defense of intellectual property and proprietary technologies. Any product candidates that we successfully commercialize may be competitive with currently marketed therapies and any new therapies commercialized in the future. While we believe our technology, drug development expertise, leadership team and strong scientific understanding of cancer targets and biology provides us with certain competitive advantages, we face potential competition from many sources, including major pharmaceutical, biotechnology, academic institutions, and other public and private research institutions.

Many companies are active across various stages of development in the oncology subsector and are marketing and developing products that employ similar ADC and immunotherapy approaches. As of April 2021, there were approximately 275 ADCs in clinical or preclinical development worldwide, of which the vast majority are being developed for the treatment of various cancer indications. Multiple companies are also involved in the marketing of ADC therapeutics which include, but are not limited to, ADC Therapeutics SA, Astellas Pharma, Inc., AstraZeneca plc, Daiichi Sankyo Company, Ltd., Genentech, Inc., Gilead Sciences, Inc, GlaxoSmithKline, plc, Pfizer, Inc., Rakuten Medical, Inc., and Seagen, Inc.

Our preclinical ADC and immunotherapy candidates may face substantial competition from alternative therapeutic modalities, such as CAR-T therapies, bispecific antibodies, and small molecules that are being developed for the same cancer types that we are targeting with our pipeline candidates. These approaches could prove to be more effective, safer, or convey other advantages over any products resulting from our technology. In addition, we also face competition on specific targets, including the target of our PYX-201 candidate, EDB, from Philogen S.p.A., the target of our PYX-202 candidate, DLK-1, from Chiome Bioscience, Inc., and the target of PYX-203 product candidate, CD123, from ImmunoGen, Inc., Vincerx Pharma, Inc., Macrogenics and Byondis B.V. Additionally, there is a wide array of activity in the development of immunotherapies for oncology which may be competitive with our preclinical discovery programs. Furthermore, if any of our product candidates are approved in oncology indications such as lung, hematological and other cancers, they may compete with existing approaches to treating cancer including surgery, radiation, and drug therapy, including conventional chemotherapy, biological products, and targeted drug small molecule therapies.

Our competitors may possess greater scientific, research and development capabilities, as well as greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. These competitors compete with us on the basis of establishing clinical trial sites and patient registration, recruiting and retaining qualified scientific and management personnel, and acquiring new technologies that may complementary, or necessary for, our programs. Our commercial opportunity for our product candidates may be dependent on the ability of our competitors to develop new products that may be more effective, safer, or less

expensive than any products that we may develop. Our competitors may succeed in developing competing products before we do, obtaining marketing approval for products and gaining acceptance for such products in the same markets that we are targeting. Smaller or earlier-stage companies that seek collaborative arrangements with large and established companies, may prove to be significant competitors. In addition, our ability to compete may be affected by the availability of reimbursement from government and other third-party payors.

Competitive factors affecting the success of our programs, if approved, will likely be based on their safety and effectiveness, the timing and scope of marketing approvals, the availability and cost of supply, the depth of marketing and sales capabilities, and reimbursement coverage.

Chemistry, Manufacturing and Controls

We believe the manufacturing of our ADCs and monoclonal antibodies requires considerable expertise, know-how, and resources. We do not own or operate and currently have no plans to establish any cGMP compliant manufacturing facilities. We currently rely, and expect to continue to rely, on external Contract Manufacturing Organizations, or CMOs, for the manufacture of product to support non-clinical and clinical testing, as well as for commercial manufacture if our product candidates receive marketing approval. Furthermore, the raw materials and intermediates for our product candidates may be sourced, in some cases, from a single-source supplier. As part of the manufacture and design process for our product candidates, we rely on internal scientific and manufacturing know-how and trade secrets and the know-how and trade secrets of third-party manufacturers. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment and personnel while also enabling us to focus our expertise and resources on the development of our current product candidates. We maintain agreements with our manufacturers that include confidentiality and intellectual property provisions to protect our proprietary rights related to our product candidates. We have personnel with significant technical, manufacturing, analytical, quality, including cGMP, and project management experience to oversee our third-party manufacturers and to manage manufacturing and quality data and information for regulatory compliance purposes.

Commercialization Plans

We retain full commercialization rights for all our product candidates, including those obtained through exclusive collaboration agreements, with the exception of PYX-202 in South Korea. We have not yet established our own commercial organization or distribution capabilities because our product candidates are still in preclinical development. Should any of our candidates receive marketing approval or licensure in the United States or elsewhere, we will need to develop a plan to realize the commercial value of the approved product candidate. At the appropriate time, we plan to build our own specialized sales and marketing organization to support the sales commercialization of approved candidates in the United States. We may also pursue collaboration, co-promotion, distribution and/or other marketing arrangements with one or more third parties to commercialize our product candidates in markets outside the United States. We may also pursue these arrangements for situations in which a larger sales and marketing organization is necessary to realize the full commercial value of any approved wholly owned or collaboration product candidates.

Licensing and Collaboration Agreements

License Agreement with Pfizer, Inc.

In December 2020, we entered into a license agreement, as amended, the “Pfizer License Agreement,” with Pfizer, Inc., or Pfizer, for worldwide development and commercialization rights to two of Pfizer’s proprietary ADC product candidates (now referred to as PYX-201 and PYX-203), as well as other ADC product candidates directed to the licensed targets. The Pfizer License Agreement became effective for the Company in March 2021. The initial exclusively licensed targets are extra domain B (EBD of fibronectin) and CD123 and we have the option to expand the scope of our license to add other licensed targets. Pfizer has also granted us a non-exclusive

license to use Pfizer's FACT platform technology to develop and commercialize the licensed ADCs. In March 2021, we entered into an amendment to the Pfizer License Agreement to include additional know-how within the scope of our license.

Pursuant to the Pfizer License Agreement, we incurred a combined $25.0 million, consisting of an upfront fee of $5.0 million and issued 12,152,145 shares of Series B Convertible Preferred Stock in 2021 to Pfizer, and are obligated to pay future contingent payments and royalties, including up to an aggregate of $660 million in milestones for the first four licensed ADCs. Additional ADC targets may be licensed for an additional upfront fee, and such targets would be subject to additional regulatory and commercial sales milestones. Additionally, if products are launched, we will pay Pfizer tiered royalties on net sales of licensed products in varying royalty rates ranging from low single digits to mid-teens. Our royalty obligations apply on a licensed product-by-licensed product and country-by-country basis from first commercial sale until the latest to occur of: (1) 12 years from first commercial sale; (2) the expiration of all regulatory or data exclusivity; and (3) the expiration of the last valid claim of a licensed patent covering the licensed product in a country. We are also obligated to pay Pfizer a percentage of certain sublicensing revenue ranging from low-double digits to thirty percent based on the stage of development of the licensed product at the time of entering into the applicable sublicense.

Under the Pfizer License Agreement, we are obligated to use commercially reasonable efforts to nominate a clinical candidate within four years of a target becoming a licensed target. We are also required to use commercially reasonable efforts to develop and seek regulatory approval for at least one licensed product directed to each licensed target in the United States and at least one other major market country (France, Germany, Italy, Japan, Spain and the United Kingdom), and to commercialize any licensed product in each such country after receiving regulatory approval. We control prosecution and enforcement with respect to any exclusively licensed patents, and Pfizer has prosecution and enforcement rights if we elect not to exercise such rights.

The Pfizer License Agreement will remain in effect until the expiration of the last to expire royalty term, unless terminated in accordance with the following: (1) by either party for the other party's material breach if such party fails to cure such breach within the specified cure period; (2) by either party upon certain insolvency events of the other party; or (3) prior to receipt of the first regulatory approval for a licensed product, by us for any reason upon 90 days' prior written notice, or after receipt of the first regulatory approval for a licensed product, by us for any reason upon one years' prior written notice.

License Agreement with the University of Chicago

In April 2020, we entered into a license agreement, or the "University License Agreement," with the University of Chicago, or the University, to obtain an exclusive license under certain patents resulting from research performed, in-part, by our scientific founder, Dr. Thomas Gajewski, as well as a non-exclusive license to certain know-how and materials. Under the terms of the license, we have the exclusive global right to develop and commercialize products that are covered by a valid claim of a licensed patent, incorporate or use the licensed know-how and materials or are known to assess, modulate or utilize the activity of certain specified biological targets.

In partial consideration for the license from the University, we issued to the University 311,076 shares of our Common Stock in 2020. Pursuant to the University License Agreement, we are obligated to pay to the University an annual maintenance fee of $10,000 commencing on the third anniversary of the effective date, potential development and commercial milestones of up to an aggregate of $7.7 million as well as running royalties on net sales of licensed products at varying rates ranging from less than one percent to the low single digits, subject to a minimum annual royalty ranging from $1.0 million to $3.0 million during certain years following the first commercial sale of a licensed product. Our royalty obligations apply on a licensed product-by-licensed product and country-by-country basis until: (1) for licensed products covered by a valid claim of a licensed patent in a given country, the expiration of such valid claims; and (2) for all other licensed

products, 10 years from the first commercial sale of a licensed product in a given country. We are also obligated to pay the University a percentage of certain sublicensing revenue ranging from low- to mid-teens based on the date of entering into the applicable sublicense.

Under the University License Agreement, we are obligated to use commercially reasonable efforts to develop and bring licensed products to market, meet certain preclinical and clinical development milestones by specific dates, and promote and sell licensed products after receipt of regulatory approval, subject to certain free and payment based extensions. The University controls prosecution of the licensed patents at our cost and we have the first right to enforce the licensed patents subject to the University's backup enforcement rights.

The University License Agreement will remain in effect on a licensed product-by-licensed product basis until the expiration of all royalty obligations with respect to a licensed product, unless terminated in accordance with the following: (1) by the University upon 30 days' prior written notice for any uncured payment breaches or 90 days prior written notice for all other uncured breaches; (2) by the University upon certain insolvency events or dissolution by us or any affiliate; or (3) by us in full or with respect to a particular licensed product at the end of the calendar quarter following the calendar quarter when we provide written notice of termination.

The Alloy Pyxis JV with Alloy Therapeutics, Inc.

In March 2021, we entered into definitive transaction agreements with Alloy to finance and operate a joint venture company, which we refer to as the Alloy Pyxis JV, formed in collaboration with Alloy to leverage Pyxis's site-specific target catalog and Alloy's ATX-Gx™ platform and antibody discovery services.

The Alloy Pyxis JV granted to both Pyxis and Alloy 50% of the voting membership units of the Alloy Pyxis JV in exchange for certain initial contributions. Our initial contribution included $50,000 and a non-exclusive fully paid-up license to certain intellectual property owned or controlled by us to enable the collaboration with the Alloy Pyxis JV as further described below. Alloy's initial contribution included $50,000 and the execution of a license agreement and a services agreement to enable the collaboration with the Alloy Pyxis JV as further described below. The Alloy Pyxis JV is governed by a board of directors consisting of an equal number of our representatives and Alloy's representatives. We have designated our CEO, Lara Sullivan M.D., as our board representative. The protective provisions under operating agreement of the Alloy Pyxis JV require the approval of both Pyxis and Alloy before the Alloy Pyxis JV may take certain actions.

In connection with the formation of the Alloy Pyxis JV, we entered into a three year research collaboration with Alloy and the Alloy Pyxis JV to identify and select certain biological targets and create development candidate antibodies directed to those targets for further preclinical development, clinical development and commercialization. Under the collaboration agreement, the parties will conduct research under a mutually agreed research plan and budget for up to six research programs focused on mutually selected targets. Each of us and Alloy will provide research support for the collaboration through separate services agreements with the Alloy Pyxis JV, which services will be paid in the form of promissory notes issued by the Alloy Pyxis JV. The Alloy Pyxis JV will own all intellectual property arising from the collaboration, subject to certain exceptions for intellectual property relating to Alloy's ATX-Gx™ platform.

If a development candidate antibody under a research program meets certain mutually agreed selection criteria, we will have the exclusive option to obtain an exclusive license from the Alloy Pyxis JV to further develop and commercialize all the development candidate antibodies discovered under that research program. We may in-license one research program on certain pre-agreed financial terms. For all other in-licensed research programs, we will be obligated to pay fair market value as determined by a third party valuation. Any research program that we do not in-license may be licensed by the Alloy Pyxis JV to a third party.

Agreements with LegoChem Biosciences, Inc.

In December 2020, we entered into a license agreement, or the "LegoChem License Agreement," with LegoChem Biosciences, Inc., or LegoChem, pursuant to which we licensed worldwide (other than Korea)

development and commercialization rights for LCB67, an ADC product candidate targeting DLK1 (now referred to as PYX-202), and products containing the licensed compound. We have the right to ask LegoChem to use commercially reasonable efforts at our cost to modify the licensed compound if there are certain technical failures of the licensed compound that we believe are attributable to the linker or the payload used in the licensed compound, and the modified compound will replace the unmodified version as the licensed compound. In February 2021, we entered into an amendment to the LegoChem License Agreement to include additional patents within the scope of our license.

Pursuant to the LegoChem License Agreement, we paid an upfront fee of $0.5 million in 2020 and $9.0 million in 2021 and are required to purchase certain initial quantities of licensed product from LegoChem for an estimated cost of $7.0 million. We are also obligated to pay up to an aggregate of $284.5 million to LegoChem if certain development, regulatory and sales milestones are achieved, as well as tiered royalties on net sales of licensed products ranging from mid-single digit to high single digit royalty rates. Our royalty obligations apply on a licensed product-by-licensed product and country-by-country basis until the latest to occur of: (1) the date of expiration of the last valid claim of a licensed patent covering the licensed product; (2) 10 years from first commercial sale; and (3) the expiration of regulatory or data exclusivity.

Under the LegoChem License Agreement, we are obligated to use commercially reasonable efforts to develop at least one licensed product for at least one indication and, upon receipt of regulatory approval in the United States, China, Japan or any three or more of the major European countries (United Kingdom, Spain, France or Germany), to commercialize at least one licensed product for at least one indication in such countries. We have agreed to purchase certain initial quantities of licensed product from LegoChem and have the right to manufacture the licensed products, provided that LegoChem has the right to control the manufacture and use of the conjugation methods and materials, linker and payload elements included in the licensed intellectual property. We control prosecution, enforcement and defense of the licensed patents that are specific to the licensed products, and LegoChem has backup rights if we elect not to exercise our rights.

During the term of the LegoChem License Agreement, neither party may, either directly or through an affiliate or sublicensee, research, in-license, develop or commercialize in the licensed territory any other ADC directed to DLK-1, including any ADC directed to more than one epitope of DLK1 (a multi-epitope DLK1) or a modification or derivative of the licensed compound. This restriction does not apply to any ADC being developed by LegoChem that is subject to our right of first negotiation. We have the right of first negotiation to obtain a license to any ADC directed to DLK1 other than a multi-epitope DLK1 controlled by LegoChem that LegoChem proposes to include in a GLP toxicology study or to license to a third party.

The LegoChem License Agreement will remain in effect on a country-by-country basis until the expiration of the obligation to pay royalties, unless terminated as follows: (1) by either party for the other party’s material breach if such party fails to cure such breach within the specified cure period; (2) by either party upon cessation of business activities or certain insolvency events of the other party; (3) by us if there are certain technical failures of the licensed compound; or (4) by us for any reason upon 90 days’ prior written notice. If we challenge the scope, ownership, validity or enforceability of a licensed patent, LegoChem may convert our exclusive license to a non-exclusive license or terminate the LegoChem License Agreement.

In December 2020, we also entered into an opt-in, investment and additional consideration agreement with LegoChem, or the “Opt-In Agreement.” Under the Opt-In Agreement, we issued to LegoChem shares of Series B Convertible Preferred Stock as part of our Series B financing in March 2021. We are also obligated to pay LegoChem a percentage of sublicensing revenue ranging from low-double digits to thirty percent based on the stage of development of the licensed product at the time of entering into the applicable sublicense, which percentage may be increased to up to fifty percent for any upfront payment from a sublicensee under certain circumstances. LegoChem has exercised its option under the Opt-In Agreement to make a $8.0 million payment to us, which payment was made in April 2021, in exchange for the right to receive an extra milestone payment of $9.6 million upon the earliest to occur of certain events, including the date of pricing or offer of the first public

offering of our common stock or if we are the subject of a change of control transaction. LegoChem may elect to receive payment for up to 50% of this extra milestone payment as well as certain development milestone payments under the LegoChem License Agreement in shares of our preferred stock.

Intellectual Property

Our intellectual property is critical to our business and we strive to protect it, including by obtaining and maintaining patent protection in the United States and internationally for our product candidates, new therapeutic approaches and potential indications, and other inventions that are important to our business. We also rely on trade secrets and proprietary know-how to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our patent portfolio includes patents and patent applications that are exclusively licensed from the University of Chicago, Pfizer, and LegoChem and patent applications that are owned by us. Our patent portfolio includes patents and patent applications that cover our product candidates PYX-201, PYX-202, and PYX-203, and the use of these candidates for therapeutic purposes in certain territories. Our proprietary technology has been developed primarily through relationships with academic institutions, Pfizer, LegoChem, and contract research organizations.

For our product candidates, we will, in general, initially pursue patent protection covering compositions of matter and methods of use. Throughout the development of our product candidates, we seek to identify additional means of obtaining patent protection that would potentially enhance commercial success, including through additional methods of use, process of making, formulation and dosing regimen-related claims.

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 file patent applications containing claims for protection of useful applications of our proprietary technologies and any products, as well as 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 existing patent claims to ensure that maximum coverage and value are obtained 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.

We recognize that 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. The patent positions of immuno-oncology companies like ours are generally uncertain and involve complex legal, scientific and factual questions. 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 platform technology. 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.

Regardless of the coverage we seek under our existing patent applications, there is always a risk that an alteration to the product or process may provide sufficient basis for a competitor to avoid infringement claims. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued, and courts can reinterpret patent scope after issuance. Moreover, many jurisdictions, including the United States, permit third parties to challenge allowed or issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims. Moreover, we cannot provide any assurance that any patents will be issued from our pending or any future applications or that any current or future issued patents will adequately protect our products.

In total, our patent portfolio, including patents licensed from the University of Chicago, Pfizer, and LegoChem and patents owned by us, comprises eight different patent families, filed in various jurisdictions worldwide, including families directed to composition of matter for antibody drug conjugates, and families directed to methods of treating cancer and identifying potential targets. Our patent portfolio includes issued patents in the United States, Taiwan, and Australia. Our patent portfolio as of August 31, 2021 is outlined below:

Composition of Matter Patents

PYX-201. We have exclusively licensed from Pfizer a patent family that includes one issued patent in Australia, 15 pending applications in Australia, Brazil, Canada, China, Europe, Hong Kong, India, Israel, Japan, South Korea, Mexico, Russia, Singapore, South Africa, and the United States that claim the composition of matter and certain methods of use with respect to PYX-201. The 20-year term of the patents in this family runs through October 2037, absent any available patent term adjustments or extensions.

PYX-202. We have exclusively licensed from LegoChem a patent family that includes one pending international patent application filed under the Patent Cooperation Treaty, or PCT, that claims the composition of matter of and certain methods of use with respect to PYX-202. We intend to file national phase applications based on this PCT application before applicable deadlines. The 20-year term of the patents in this family runs through March 2040, absent any available patent term adjustments or extensions.

PYX-203. We have exclusively licensed from Pfizer a patent family that includes one issued patent in Taiwan, 23 pending applications in Australia, Brazil, Canada, China, Colombia, Europe, Hong Kong, India, Indonesia, Israel, Japan, South Korea, Malaysia, Mexico, New Zealand, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Taiwan, and the United States that claim the composition of matter and certain methods of use with respect to PYX-203. The 20-year term of the patents in this family runs through October 2038, absent any available patent term adjustments or extensions.

Methods related to T Cell Activity

We have exclusively licensed from the University of Chicago a patent family that includes two issued patents in the United States, and pending applications in Europe and the United States that claim methods for treating patients with immunotherapy based on the identification of the patient as having non-anergic T cells after measuring expression levels of various genes. The 20-year term for patents in this family runs through March 2034, absent any available patent term adjustments or extensions.

Methods of treating solid tumor cancers

We have exclusively licensed from the University of Chicago a patent family that includes one issued patent and one pending application in the United States that claim methods for treating solid tumor cancers. The 20-year term for patents in this family runs through March 2036, absent any available patent term adjustments or extensions.

Methods of treating cancer by targeting dysfunctional tumor antigen-specific CD8+ T cells

We have exclusively licensed from the University of Chicago a patent family that includes six pending applications in Canada, China, Europe, Japan, Hong Kong, and the United States that claim methods of treating cancer comprising administering an agent that specifically targets dysfunctional tumor antigen-specific $CD8^+$ T cells. The 20-year term for patents in this family runs through January 2038, absent any available patent term adjustments or extensions.

Methods of generating target lists

We own two pending United States provisional patent applications directed to methods of identifying potential targets. The 20-year term for patents in this family runs through to 2041, excluding any extension of patent term that may be available.

We expect to file future patent applications on innovations that are developed in the course of advancing our pipeline through preclinical and clinical development.

Patent Term and Term Extensions

Individual patents have terms for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, utility patents issued for applications filed in the United States are granted a term of 20 years from the earliest effective filing date of a non-provisional patent application. In addition, in certain instances, the term of a U.S. patent can be extended to recapture a portion of the United States Patent and Trademark Office, or the USPTO, delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory review period. However, as to the FDA component, the restoration period cannot be longer than five years and the restoration period cannot extend the patent term beyond 14 years from FDA approval. In addition, only one patent applicable to an approved drug is eligible for the extension, and only those claims covering the approved drug, a method for using it, or a method of manufacturing may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. We will, in general, pursue available patent term extensions in the U.S. and in foreign jurisdictions that provide for patent term extensions, however, there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions. All taxes, annuities or maintenance fees for a patent, as required by the USPTO and various foreign jurisdictions, must be timely paid in order for the patent to remain in force during this period of time.

The actual protection afforded by a patent may vary on a product by product basis, from country to country, and can depend upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions and the availability of legal remedies in a particular country and the validity and enforceability of the patent.

Our patents and patent applications may be subject to procedural or legal challenges by others. We may be unable to obtain, maintain and protect the intellectual property rights necessary to conduct our business, and we may be subject to claims that we infringe or otherwise violate the intellectual property rights of others, which could materially harm our business. For more information, see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

Trademarks and Know-How

In connection with the ongoing development and advancement of our product candidates in the United States and various international jurisdictions, we seek to create protection for our marks and enhance their value by pursuing trademarks where available and when appropriate. In addition to patent and trademark protection, we rely upon trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees and consultants and invention assignment agreements with our employees and selected consultants. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and our trade secrets and other proprietary information may be disclosed. We may not have adequate remedies for any breach and could lose our trade secrets and other

proprietary information through such a 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.

Our commercial success will also depend in part on not infringing the proprietary rights of third parties. In addition, we have licensed rights under proprietary technologies of third parties to develop, manufacture and commercialize specific aspects of our future products and services. It is uncertain whether the issuance of any third party patent would require us to alter our development or commercial strategies, alter our processes, obtain licenses or cease certain activities. The expiration of patents or patent applications licensed from third parties or our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our future technology 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 proceedings in the USPTO to determine priority of invention.

For more information regarding the risks related to our intellectual property, please see “Risk Factors—Risks Related to Our Intellectual Property.”

Government Regulation

The research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, recordkeeping, serialization and tracking, promotion, advertising, distribution and marketing, post-approval or licensure monitoring and reporting, and export and import, among other things, of our product candidates are extensively regulated by governmental authorities in the United States and other countries. In the United States, the FDA regulates biological products under the Federal Food, Drug, and Cosmetic Act, or the FDCA, and its implementing regulations, and the Public Health Service Act, or the PHSA, and its implementing regulations. Failure to comply with the applicable U.S. requirements may subject us to administrative or judicial sanctions, such as the FDA’s refusal to approve a BLA, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions and/or criminal prosecution.

Approval and Licensure Process for Biological Products

Biological products such as ours may not be commercially marketed without prior licensure from the FDA and approval or licensure from comparable regulatory agencies in other countries. In the United States, the process for receiving such licensure is long, expensive and risky, and includes the following steps:

- preclinical laboratory tests, animal studies, and formulation studies;
- submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;
- approval by an IRB at each clinical site before each trial may be initiated;
- adequate and well-controlled human clinical trials to establish the safety, purity, and potency of the drug for each indication;
- submission to the FDA of a BLA;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the biological product is produced to assess compliance with cGMP;
- a potential FDA audit of the preclinical and clinical trial sites that generated the data in support of the BLA;

- the ability to obtain clearance or approval of companion diagnostic tests, if required, on a timely basis, or at all;
- FDA review and approval of the BLA prior to any commercial marketing or sale of the drug in the United States; and
- compliance with any post-approval requirements, including the potential requirement to implement a REMS, and the potential requirement to conduct post-approval studies.

In guidance, FDA has stated that it considers antibody-drug conjugates to be combination biological product-drug products for which a BLA should be submitted. FDA has also stated in guidance that it regulates monoclonal antibodies as biological products which require a BLA.

Regulation by U.S. and foreign governmental authorities is a significant factor affecting our ability to commercialize any of our products, as well as the timing of such commercialization and our ongoing research and development activities. The commercialization of drug products requires regulatory approval by governmental agencies prior to commercialization. Various laws and regulations govern or influence the research and development, non-clinical and clinical testing, manufacturing, processing, packaging, validation, safety, labeling, storage, record keeping, registration, listing, distribution, advertising, sale, marketing and postmarketing commitments of our products. The lengthy process of seeking these approvals, and the subsequent compliance with applicable laws and regulations, require expending substantial resources.

The results of preclinical testing, which include laboratory evaluation of product chemistry, formulation, toxicity and carcinogenicity, animal studies to assess the potential safety, purity and potency of the product and its formulations, details concerning the drug manufacturing process and its controls, and a proposed clinical trial protocol and other information must be submitted to the FDA as part of an IND that must be reviewed and become effective before clinical testing can begin. The study protocol and informed consent information for patients in clinical trials must also be submitted to an independent Institutional Review Board, or IRB, for approval covering each institution at which the clinical trial will be conducted. Once a sponsor submits an IND, the sponsor must wait 30 calendar days before initiating any clinical trials. If the FDA has comments or questions within this 30-day period, the issue(s) must be resolved to the satisfaction of the FDA before a clinical trial can begin. In addition, the FDA or an IRB may impose a clinical hold on ongoing clinical trials if, among other things, it believes that a clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable and significant risk to clinical trial patients. If the FDA imposes a clinical hold, clinical trials can only proceed under terms authorized by the FDA. If applicable, our preclinical and clinical studies must conform to the FDA's Good Laboratory Practice, or GLP, and Good Clinical Practice, or GCP, requirements, respectively, which are designed to ensure the quality and integrity of submitted data and protect the rights and well-being of study patients. Information for certain clinical trials also must be publicly disclosed within certain time limits on the clinical trial registry and results databank maintained by the NIH.

Typically, clinical testing involves a three-phase process; however, the phases may overlap or be combined:

- Phase 1 clinical trials typically are conducted in a small number of volunteers or patients to assess the early tolerability and safety profile, the pattern of drug absorption, distribution and metabolism, the mechanism of action in humans, and may include studies where investigational drugs are used as research to explore biological phenomena or disease processes;
- Phase 2 clinical trials typically are conducted in a limited patient population with a specific disease in order to assess appropriate dosages and dose regimens, expand evidence of the safety profile and evaluate preliminary efficacy; and
- Phase 3 clinical trials typically are larger scale, multicenter, well-controlled trials conducted on patients with a specific disease to generate enough data to statistically evaluate the efficacy and safety of the product, to establish the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug.

A therapeutic product candidate being studied in clinical trials may be made available for treatment of individual patients, intermediate-size patient populations, or for widespread treatment use under an expanded access protocol, under certain circumstances. Pursuant to the 21st Century Cures Act, or Cures Act, which was signed into law in December 2016, the manufacturer of one or more investigational products for the diagnosis, monitoring, or treatment of one or more serious diseases or conditions is required to make available, such as by posting on its website, its policy on evaluating and responding to requests for individual patient access to such investigational product.

Additionally, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017 was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA authorization under an FDA expanded access program; however, manufacturers are not obligated to provide investigational new drug products under the current federal right to try law.

Disclosure of Clinical Trial Information

Sponsors of certain clinical trials of FDA-regulated products are required to register and disclose certain clinical trial information. Information related to the product, patient population, phase of investigation, trial sites and investigators, and other aspects of the clinical trial are then made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Orphan Drugs

Under the Orphan Drug Act, the FDA may grant orphan drug designation to therapeutic candidates (drugs or biological products) intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the U.S. or more than 200,000 individuals in the U.S. and for which there is no reasonable expectation that the cost of developing and making available in the U.S. a therapeutic candidate for this type of disease or condition will be recovered from sales in the U.S. for that therapeutic candidate. Orphan drug designation must be requested before submitting a marketing application for the therapeutic candidate for that particular disease or condition. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process. Among the other benefits of orphan drug designation are tax credits for certain research and an exemption from the BLA application fee. The FDA may revoke orphan drug designation, and if it does, it will publicly disclose that the product is no longer designated as an orphan drug.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the biological product was designated. Orphan drug exclusivity does not prevent the FDA from approving a different biological product for the same disease or condition, or the same biological product for a different disease or condition.

A designated orphan drug may not receive orphan drug exclusivity if it is licensed for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the

manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Expedited Development and Review Programs

The FDA has a number of programs intended to expedite the development and review of product candidates. For example, Fast Track designation is intended to expedite or facilitate the process for reviewing new biological products that meet certain criteria. Specifically, new biological products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new biological product may request the FDA to designate the biological product as a Fast Track product at any time during the clinical development of the product. Unique to a Fast Track product, the FDA may consider for review sections of the marketing application on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application. FDA may revoke the Fast Track designation if it believes that the designation is no longer supported by data emerging in the clinical trial process.

Under the Breakthrough Therapy program, products intended to treat a serious or life-threatening disease or condition may be eligible for Breakthrough Therapy designation, which includes eligibility for the benefits of the Fast Track program, when preliminary clinical evidence demonstrates that such product may have substantial improvement on one or more clinically significant endpoints over existing therapies. Additionally, FDA will seek to ensure the sponsor of a breakthrough therapy product receives timely advice and interactive communications to help the sponsor design and conduct a development program as efficiently as possible.

A product is eligible for priority review if it is intended to treat a serious condition and, if approved or licensed, it would provide a significant improvement in safety or effectiveness. FDA intends to take action on a priority review marketing application within six months of receipt, compared to 10 months of receipt for regular review submissions.

Additionally, a product may be eligible for accelerated approval if it is intended to treat a serious or life-threatening disease or condition and would provide meaningful therapeutic benefit over existing treatments. Accelerated approval may be granted on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality and is reasonably likely to predict an effect on irreversible morbidity, mortality, or other clinical benefit. As a condition of approval, the FDA may require that a sponsor of a biological product receiving accelerated approval diligently perform adequate and well-controlled postmarketing clinical studies demonstrating clinical benefit. In addition, the FDA requires as a condition for accelerated approval the submission of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast Track designation, Breakthrough Therapy designation, priority review and accelerated approval do not change the standards for licensure but may expedite the review process.

Pediatric studies and exclusivity

Under the Pediatric Research Equity Act of 2003, a BLA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the biological product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, sponsors must also submit pediatric study plans prior to the assessment data.

Those pediatric study plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and other information required by regulation. The applicant, the FDA and the FDA's internal review committee must then review the information submitted, consult with each other and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after licensure of the product for use in adults, or full or partial waivers from the pediatric data requirements. Additional requirements and procedures relating to deferral requests and requests for extension of deferrals are contained in FDASIA. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is a type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity. This six-month exclusivity may be granted if a BLA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application.

FDA Review of BLAs

After completion of the required clinical testing, a BLA is prepared and submitted to the FDA. FDA approval of the BLA is required before marketing of the product may begin in the United States. The BLA must include the results of all preclinical, 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 a BLA is substantial. The submission of most BLAs is additionally subject to a substantial application user fee, currently exceeding $2,875,842 for fiscal year 2021, and the manufacturer and sponsor under an approved BLA are also subject to annual program fees, currently $336,432 for each prescription product. These fees are typically increased annually. Sponsors of applications for drugs granted Orphan Drug Designation are exempt from these user fees.

The FDA has 60 days from its receipt of a BLA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept a BLA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of BLAs to encourage timeliness. Applications for standard review drug products are meant to be reviewed within ten months; applications for priority review drugs are meant to be reviewed in six. 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 is required to refer an application for a novel biological product to an advisory committee or explain why such referral was not made. An advisory committee is 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 a BLA, 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 license the product unless compliance with cGMPs is satisfactory, and the application meets the appropriate standard. A BLA must include data that demonstrate that the biological product is safe, pure, and potent.

After the FDA evaluates the BLA and accompanying information and the manufacturing facilities, it issues either an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the BLA, 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. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

An approval or licensure letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of BLA licensure, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the biological product 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 licensure may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product licenses may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

If the FDA approves a product, it may limit the approved indications for use for the product; require that contraindications, warnings or precautions be included in the product labeling; require that postmarketing studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after licensure; require testing and surveillance programs to monitor the product after commercialization; or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. 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, as applicable, of a new BLA or supplement before the change can be implemented. A BLA 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 supplements as it does in reviewing BLAs.

Biosimilars and Reference Product Exclusivity

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological product candidates shown to be highly similar, or "biosimilar," to or interchangeable with an FDA licensed reference biological product. Biosimilarity, which requires that a product is highly similar to the reference product notwithstanding minor differences in clinically inactive components, and that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can generally be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the interchangeable biosimilar and the reference biological product may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biological product. A product shown to be biosimilar or interchangeable with an FDA-approved reference biological

product may rely in part on the FDA's previous determination of safety and effectiveness for the reference product for approval, which can potentially reduce the cost and time required to obtain approval to market the product. Complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles and have slowed implementation of the BPCIA by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of reference product exclusivity, another company may obtain FDA licensure and market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. As stated above, pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, there has been discussion of whether Congress should reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate implementation of the BPCIA is subject to significant uncertainty.

Post-Licensure FDA Requirements

Biological products manufactured or distributed pursuant to FDA licenses are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion with the product. After licensure, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and licensure. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

Often times, even after a biological product has been licensed by the FDA for sale, the FDA may require that certain post-licensure requirements be satisfied, including the conduct of additional clinical studies. If such post-approval requirements are not satisfied, the FDA may withdraw its licensure of the biological product. In addition, holders of a biological product license are required to report certain adverse reactions to the FDA, comply with certain requirements concerning advertising and promotional labeling for their products, and continue to have quality control and manufacturing procedures conform to cGMP after approval. In addition, biological product manufacturers and their subcontractors are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements and other aspects of regulatory compliance. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Among the conditions for BLA licensure is the requirement that the manufacturing operations conform on an ongoing basis with cGMP. In complying with cGMP, we must expend time, money and effort in the areas of training, production and quality control within our own organization and at our contract manufacturing facilities. A successful inspection of the manufacturing facility by the FDA is usually a prerequisite for final licensure of a biological product. Following licensure of the BLA, we and our manufacturers will remain subject to periodic inspections by the FDA to assess continued compliance with cGMP requirements and the conditions of licensure. We will also face similar inspections coordinated by foreign regulatory authorities. The FDA periodically inspects the sponsor's records related to safety reporting and/or manufacturing facilities; this latter effort includes assessment of compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

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

- Restrictions on the marketing or manufacturing of the product, including total or partial suspension of production, complete withdrawal of the product from the market or product recalls;
- Fines, warning letters or holds on post-licensure clinical trials;
- Refusal of the FDA to license pending BLAs or supplements, or suspension or revocation of product licensure;
- Product seizure or detention, or refusal to permit the import or export of products;
- Consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- Mandated modification of promotional materials and labeling and the issuance of corrective information;
- The issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- Injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates marketing, labeling, advertising and promotion of products that are placed on the market. Biological products may be promoted only for the licensed indications and in accordance with the provisions of the approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off label uses may be subject to significant liability. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products.

In addition, the distribution of prescription drug products, including most biological products that require a prescription, are is subject to the Prescription Drug Marketing Act, or the PDMA, which regulates the distribution of drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription drug product samples and impose requirements to ensure accountability in distribution.

Patent term extension

After BLA licensure, owners of relevant drug patents may apply for up to a five-year patent extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory process. The allowable patent term extension is typically calculated as one-half the time between the effective date of an IND and the submission date of a BLA, plus the time between BLA submission date and the BLA approval date up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue licensure with due diligence. The total patent term after the extension may not exceed 14 years from the date of product licensure. Only one patent applicable to a licensed biological product is eligible for extension and only those claims covering the product, a method for using it, or a method for manufacturing it may be extended and the application for the extension must be submitted prior to the expiration of the patent in question. 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.

FDA approval and regulation of companion diagnostics

A therapeutic product may rely upon an *in vitro* companion diagnostic for use in selecting the patients that will be more likely to respond to that therapy. If safe and effective use of a therapeutic depends on an *in vitro* diagnostic, then the FDA generally will require approval or clearance of that diagnostic, known as a companion diagnostic, at the same time that the FDA approves the therapeutic product. In August 2014, the FDA issued final guidance clarifying the requirements that will apply to approval of therapeutic products and *in vitro* companion diagnostics. According to the guidance, for novel drugs, a companion diagnostic device and its corresponding therapeutic should be approved or cleared contemporaneously by the FDA for the use indicated in the therapeutic product's labeling. In July 2016, the FDA issued a draft guidance intended to assist sponsors of the drug therapeutic and *in vitro* companion diagnostic device on issues related to co-development of the products.

If FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion diagnostic device is not approved or cleared for that indication. Approval or clearance of the companion diagnostic device will ensure that the device has been adequately evaluated and has adequate performance characteristics in the intended population. The review of *in vitro* companion diagnostics in conjunction with the review of our therapeutic product candidates will, therefore, likely involve coordination of review by the FDA's Center for Biologics Evaluation and Research and the FDA's Center for Devices and Radiological Health.

Under the FDCA, *in vitro* diagnostics, including companion diagnostics, are regulated as medical devices. In the United States, the FDCA and its implementing regulations, and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Unless an exemption applies, diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The three primary types of FDA marketing authorization applicable to a medical device include premarket notification, also called 510(k) clearance, premarket approval, or PMA, and De Novo classification requests. The FDA has generally required *in vitro* companion diagnostics intended to select the patients who will respond to cancer treatment to obtain a PMA for that diagnostic simultaneously with approval of the drug.

The PMA process, including the gathering of clinical and preclinical data and the submission to and review by the FDA, can take several years or longer. It involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee of $365,657 for most PMAs for FY 2021. In

addition, PMAs for certain devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. In particular, for a diagnostic, a PMA application typically requires data regarding analytical and clinical validation studies. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation, or QSR, which imposes elaborate testing, control, documentation and other quality assurance requirements.

PMA approval is not guaranteed, and the FDA may ultimately respond to a PMA submission with a not approvable determination based on deficiencies in the application and require additional clinical trial or other data that may be expensive and time-consuming to generate and that can substantially delay approval. If the FDA's evaluation of the PMA application is favorable, the FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, in order to secure final approval of the PMA. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. The FDA may also determine that additional clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. If the FDA concludes that the applicable criteria have been met, the FDA will issue a PMA for the approved indications, which can be more limited than those originally sought by the applicant. The PMA can include post-approval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution, and the requirement for post approval studies as well as postmarketing surveillance. Once granted, PMA approval may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards are not maintained or problems are identified following initial marketing.

After a device is placed on the market, it remains subject to significant regulatory requirements. Medical devices may be marketed only for the uses and indications for which they are cleared or approved. Device manufacturers must also establish registration and device listings with the FDA. A medical device manufacturer's manufacturing processes and those of its suppliers are required to comply with the applicable portions of the QSR, which cover the methods and documentation of the design, testing, production, processes, controls, quality assurance, labeling, packaging and shipping of medical devices. Manufacturers are also subject to medical device reporting requirements as well as reporting certain requirements related to device corrections and removals. Domestic facility records and manufacturing processes are subject to periodic unscheduled inspections by the FDA. The FDA also may inspect foreign facilities that export products to the U.S.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our product candidates to the extent we choose to sell any products outside of the United States. Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities and, if required, from independent ethics committees in foreign countries before we can commence clinical trials as well as regulatory approvals prior to marketing the product candidates in those countries. The approval processes vary from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country. As in the United States, post-approval regulatory requirements, such as those regarding product manufacture, marketing, or distribution would apply to any product that is approved outside the United States.

Other Healthcare Laws

Among others, the FDA, U.S. Department of Health and Human Services, or HHS, Office of Inspector General, the Centers for Medicare and Medicaid Services, or CMS, and comparable regulatory authorities in state

and local jurisdictions and in other countries impose substantial and burdensome requirements upon companies involved in the preclinical and clinical development, manufacture, marketing, and distribution of drugs such as those we are developing. These agencies and other federal, state, and local entities regulate, among other activities, the research and development, testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, sales, commercialization, marketing, advertising and promotion, distribution, post-approval monitoring and reporting, sampling, and export and import of our product candidates. Any drug candidates that we develop must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in those foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in the European Union, or EU, are addressed in a centralized way, but country-specific regulation remains essential in many respects.

Although we do not currently have any products on the market, in addition to FDA restrictions on marketing of pharmaceutical products, we are also subject to healthcare statutory and regulatory requirements and enforcement by the U.S. federal and state governments. Pharmaceutical companies like us are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such regulation and may constrain the financial arrangements and relationships through which we research, develop, and, ultimately, sell, market, and distribute any products for which we obtain marketing approval. Such laws include, without limitation:

- The federal Anti-Kickback Statute, an intent-based criminal statute that prohibits, among other activities, persons and entities from knowingly and willfully soliciting, offering, paying, receiving, or providing any remuneration (including any kickback, bride, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order, or recommendation of, any item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as Medicare or 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 civil and criminal false claims laws, including the civil False Claims Act, or FCA, which prohibit individuals or entities from, among other activities, knowingly presenting, or causing to be presented, to the federal government claims for payment or approval that are false, fictitious, or fraudulent; knowingly making, using, or causing to be made or used, a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government. In addition, the government may assert that a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a “whistleblower” to bring *qui tam* actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery or settlement.
- The federal civil monetary penalties laws, which prohibit, among other activities (1) arranging for or contracting with an individual or entity that is excluded from participation in federal healthcare programs to provide items or services reimbursable by a federal healthcare program, (2) failing to report and return a known overpayment, or (3) offering or transferring any remuneration to a Medicare or Medicaid beneficiary if the person knows or should know it is likely to influence the beneficiary’s selection of a particular provider, practitioner, or supplier of items or services reimbursable by Medicare or Medicaid, unless an exception applies.
- The federal criminal statutes enacted under the Health Insurance Portability and Accountability Act of 1996, or HIPAA, which impose criminal liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or

property owned by, or under the custody or control of, any healthcare benefit program; knowingly and willfully embezzling or stealing from a healthcare benefit program; willfully preventing, obstructing, misleading, or delaying a criminal investigation of a healthcare offense; and knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false statements 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.

- The federal Physician Payment Sunshine Act, enacted as part of the Patient Protection and Affordable Care Act, which imposes annual reporting requirements for certain manufacturers of drugs, devices, biological products, and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, for certain payments and "transfers of value" provided to "covered recipients," which include U.S.-licensed physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by such physicians and their immediate family members. For reports submitted to CMS on or after January 1, 2022, such obligations will include the reporting of payments and other transfers of value provided in the previous year to certain other healthcare professionals, including physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, anesthesiologist assistants and certified nurse midwives,
- The FDCA and PHSA, which regulate licensure of biological products and prohibit the misbranding and adulteration of biological products.
- Analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply with respect to healthcare items or services reimbursed by non-governmental third party-payors and may be broader than their federal equivalents; state and foreign laws requiring pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and/or the relevant compliance guidance promulgated by the federal government or otherwise restricting payments that may be made to healthcare providers; state laws and regulations requiring drug manufacturer disclosures to state agencies and/or commercial purchasers with respect to certain price increases; state and foreign laws requiring drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers and restricting marketing practices or requiring disclosure of marketing expenditures and pricing information; and state and local laws that requiring registration of pharmaceutical sales representatives.

Violations of any of these laws or any other applicable laws or regulations may result in significant penalties, including, without limitation, administrative, civil, and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations to resolve allegations of noncompliance, exclusion from participation in federal and state healthcare programs, such as Medicare and Medicaid, and imprisonment. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from its business.

Coverage and Reimbursement

Sales of any pharmaceutical product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance, and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a payor-by-payor basis. These third-party payors are increasingly reducing coverage and reimbursement for healthcare items (including drugs) and services. Moreover, for products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself may or may

not be available. Instead, the hospital or administering physician may be reimbursed only for providing the treatment or procedure in which our product is used.

In addition, the U.S. government, states, and foreign governments have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement, and requirements for substitution of lower-cost or generic products. Adoption of price controls and cost-containment measures and adoption of more restrictive policies in jurisdictions with existing controls and measures could further limit sales of any drug product. Decreases in third-party reimbursement for any drug product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales.

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

Healthcare Reform

In the United States, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively known as the ACA, was enacted, which substantially changed the way healthcare is financed by both governmental and private payors, and significantly affected the pharmaceutical industry. The ACA contained a number of provisions, including those governing the federal healthcare programs, provider reimbursement, and healthcare fraud and abuse laws. For example, the ACA:

- increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the AMP;
- required collection of rebates for drugs paid by Medicaid managed care organizations;
- expanded beneficiary eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 138% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- extended manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expanded the types of entities eligible for the 340B Drug Pricing Program;
- established a new methodology by which rebates owed by manufacturers under the Medicaid Drug and Rebate Program, or MDRP, are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- required manufacturers to participate in a coverage gap discount program, under which they must agree to offer 70 percent point-of-sale discounts off negotiated prices of applicable branded drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell "branded prescription drugs" and biologic agents apportioned among these entities according to their market share in certain federal government programs;
- established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending;

- created the Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- required reporting of certain financial arrangements between manufacturers of drugs, biologics, devices, and medical supplies and physicians and teaching hospitals under the federal Physician Payments Sunshine Act; and
- required annual reporting of certain information regarding drug samples that manufacturers and distributors provide to licensed practitioners.

Since its enactment, there have been executive, judicial, and legislative branch challenges to certain aspects of the ACA, and, on June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden had issued an executive order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, policies that create barriers to obtaining access to health insurance coverage through the ACA marketplaces. It is unclear how healthcare reform measures enacted by Congress or implemented by the Biden administration or other efforts to challenge, repeal or replace the ACA, if any, will impact the ACA.

Other legislative changes have been proposed and adopted in the U.S. since the ACA was enacted. These changes include the Budget Control Act of 2011, which, among other changes, led to aggregate reductions in Medicare payments to providers of up to 2% per fiscal year that started in April 2013 and, due to subsequent legislation, will continue into 2031, with the exception of a temporary suspension of the payment reduction from May 1, 2020 through December 31, 2021 due to the COVID-19 pandemic, unless additional Congressional action is taken. Most recently, the American Rescue Plan Act of 2021 eliminates the statutory cap on drug manufacturers' MDRP rebate liability effective January 1, 2024. Under current law enacted as part of the ACA, drug manufacturers' MDRP rebate liability is capped at 100% of AMP for a covered outpatient drug.

The cost of prescription drugs has been the subject of considerable policy discussion and debate in the United States. Congress has considered and passed legislation, and the former Trump administration pursued several regulatory reforms to further increase transparency around prices and price increases, lower out-of-pocket costs for consumers, and decrease spending on prescription drugs by government programs. Congress has also continued to conduct inquiries into the prescription drug industry's pricing practices. While several proposed reform measures will require Congress to pass legislation to become effective, Congress and the Biden administration have expressed support for legislative and/or administrative measures to address prescription drug costs. Since the Presidential inauguration, the Biden administration has also taken several executive actions that signal changes in policy from the prior administration, including with respect to executive actions by the Trump administration related to prescription drug costs. At the state level, legislatures are increasingly passing legislation and states are implementing regulations designed to control spending on, and patient out-of-pocket costs for, drug products.

We expect that additional state and federal healthcare reform and/or drug pricing measures will be adopted in the future, any of which could affect the pricing and/or availability of drug products, the amounts that federal and state governments and other third-party payors will pay for healthcare products and services, and/or our ability to generate revenue, attain or maintain profitability, or commercialize products for which we may receive regulatory approval in the future.

Data Privacy & Security

Numerous state, federal and foreign laws and regulations govern the collection, dissemination, use, access to, privacy and security of personal information (including health-related information). Such laws and regulations

that could apply to our operations or the operations of our partners include health information privacy and security laws (e.g., HIPAA), federal and state consumer protection laws and regulations (e.g., Section 5 of the Federal Trade Commission Act), state privacy laws (e.g., the California Consumer Privacy Act, or CCPA, California Consumer Privacy Rights Act, or CPRA, which goes into effect in 2023, the Virginia Consumer Data Protection Act which goes into effect in 2023), data breach notification laws, and the EU General Data Protection Regulation, or GDPR. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Employees and Human Capital Resources

As of September 15, 2021, we employed 38 full-time permanent employees. Of these employees, approximately 58% have advanced degrees including but not limited to Ph.D., M.D., M.B.A., and approximately 63% were engaged in research and development activities and 11% in business development activities. Approximately half of our workforce and more than half of our executive leadership, is comprised of women. None of our employees are represented by a labor union or covered by 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 employees. We also place a high value on the diversity of our team –including gender, background and expertise – to foster our culture of innovation. The principal purposes of our equity incentive plans are to align the interests of our stockholders and those eligible for awards, to retain and incentivize officers, directors, employees, and other service providers, and to encourage them to act in our long-term best interests. We value our employees and regularly evaluate the total compensation we provide, including paid time off, personal leave and other benefits, to ensure we remain competitive and attractive to potential new hires.

Facilities

Our headquarters are located at 35 CambridgePark Drive, Cambridge, MA 02140, where we lease approximately 8,955 rentable square feet of office and laboratory space under a lease that terminates on October 31, 2021 which has been extended through March 31, 2022. We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

Legal Proceedings

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. As of the date of this prospectus, we were not a party to any material legal matters or claims.

MANAGEMENT

Executive Officers and Directors

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

Name	Age	Position(s)
Executive Officers		
Lara Sullivan, M.D.	48	Chief Executive Officer and Director
Pamela Connealy	60	Chief Financial Officer
Jay Feingold, M.D., Ph.D.	64	Chief Medical Officer
Ronald Herbst, Ph.D.	60	Chief Scientific Officer
Ritu Shah	45	Chief Operating Officer
Non-Employee Directors		
David Steinberg*	49	Chairman of the Board
John Flavin(1)(2)**	52	Director
Lucio Iannone, Ph.D.*	38	Director
Gotham Makker, M.D.*	47	Director
Christopher O'Donnell Ph.D.*	52	Director
Mark Chin(2)(3)	39	Director
Freda Lewis-Hall, M.D.(3)	66	Director
Thomas Civik(1)(2)	52	Director
Darren Cline(1)(3)	56	Director

(1) Member of our audit committee
(2) Member of our compensation committee
(3) Member of our nominating and governance committee
* David Steinberg, Lucio Iannone Ph.D., Gotham Makker M.D. and Christopher O'Donnell Ph.D. will resign as directors immediately prior to the effectiveness of the registration statement on Form S-1, of which this prospectus forms a part.
** John Flavin will become the Chairman of the Board immediately prior to the effectiveness of the registration statement on Form S-1, of which this prospectus forms a part.

The following are brief biographies describing the backgrounds of our executive officers and non-employee directors:

Executive Officers

Lara Sullivan, M.D. has served as our Chief Executive Officer of Pyxis Oncology since December 2019. Prior to joining us, Dr. Sullivan was a senior advisor from July 2018 to September 2019 at Lara Sullivan BioAdvisory Services, consulting for biotechnology companies. From September 2017 to June 2018, Dr. Sullivan was Founder and President of SpringWorks Therapeutics, a clinical stage biopharmaceutical company spun-out from Pfizer. Between February 2011 and September 2017, Dr. Sullivan was at Pfizer, where she led strategy, competitive intelligence and portfolio operations for the company's early-stage R&D pipeline. Prior to joining Pfizer, Dr. Sullivan was an associate partner at McKinsey & Company, where she specialized in biopharmaceutical R&D productivity and efficiency. Dr. Sullivan also served as a principal at Paul Capital Partners, where she led due diligence for healthcare investments, and earlier in her career worked in healthcare equity research and healthcare municipal finance at Credit Suisse First Boston.

Lara holds an M.D. from the University of Pennsylvania School of Medicine, an M.B.A. from The Wharton School at the University of Pennsylvania, and a B.A. in Comparative Literature from Cornell University.

We believe that Lara is qualified to serve on our board of directors because of her extensive expertise and experience in the life sciences industry, her leadership and management experience and her educational background.

Pamela Connealy has served as our Chief Financial Officer since July 2021. From November 2019 to July 2021, Ms. Connealy served as Chief Financial Officer and Chief Human Resources Officer at Immunovant, a New York based biotechnology company. From August 2018 to November 2019, Ms. Connealy served as the Chief Financial Officer, Chief Operating Officer and Chief Human Resources Officer of Kiva, a San Francisco based nonprofit organization. From April 2014 to June 2018, Ms. Connealy served as Global Head of Talent at the Bill & Melinda Gates Foundation, focusing on talent management, compensation, benefits, and global mobility. From March 2012 to November 2013, she served as Vice President of Business Operations at Salesforce, a software company, and from March 2002 to April 2010, Ms. Connealy served as a Vice President and Corporate Officer at Genentech, a biotechnology company, with roles including Chief Financial Officer of Research & Development, Global Head of Procurement and other Commercial and Technology roles. Ms. Connealy currently serves as a member of the board of directors and Chair of the audit committee of Orchestra BioMed, Inc., a biotechnology company.

Ms. Connealy earned a B.S. in Chemistry from Gannon University and an M.B.A. in Finance from the University of St. Thomas in Houston, Texas.

Jay Feingold, M.D. Ph.D. joined us in September 2021 and serves as our Chief Medical Officer. Prior to joining us, from September 2014 to September 2021, he was the Senior Vice President, Chief Medical Officer and Head of Oncology Clinical Development of ADC Therapeutics SA. From 2010 to 2014, he was Vice President of U.S. Medical Affairs and Chairman of the Global Medical Affairs Oversight Committee at Daiichi Sankyo Company, Ltd. From 2007 to 2010, Dr. Feingold was Vice President of Global Oncology Clinical Development and Global Therapy Area Director of Oncology at Wyeth Pharmaceuticals, Inc.

Dr. Feingold holds a B.S. in biology from Stony Brook University and an M.D. and Ph.D. from the Albert Einstein College of Medicine and was trained in pediatrics and pediatric hematology and oncology at the University of California Los Angeles Center for the Health Sciences.

Ronald Herbst, Ph.D. has served as our Chief Scientific Officer since October 2019. Prior to joining us, between 2014 and 2019, Dr. Herbst was Vice President, Research & Development and Head of Oncology Research at MedImmune, the global biologics research and development arm of AstraZeneca, where he served as Chair of the Oncology Research Committee and as member of the MedImmune Research Leadership Team. Under his leadership, the oncology group brought 10 novel targets to the clinic in the areas of immunotherapy and antibody drug conjugates. Prior to that, Ronald focused on the company's respiratory, inflammation and autoimmunity efforts, where he led the advancement of 4 novel molecules into the clinic, including one that is now approved by the US Food and Drug Administration.

Before joining MedImmune, Ronald was Senior Principal Investigator in oncology at DNAX, a Schering Plough biotechnology subsidiary.

Ronald conducted his postdoctoral research in the Department of Biology at Stanford University. He obtained his Ph.D. at the Ludwig-Maximilian University of Munich, with research conducted at the Max-Planck Institute of Biochemistry in Axel Ullrich's Laboratory. Ronald has (co)-authored more than 100 publications and is co-inventor on 17 pending or granted patents.

Ritu Shah has served as our Chief Operating Officer since March 2021. Ritu has over 20 years of experience in the pharmaceutical and biotech industry specializing in portfolio management and strategic planning. Prior to joining us, between July 2018 and March 2021, Ritu served as the Vice President of Business Operations and Program Management of Levo Therapeutics where she led the operations for the Phase 3 trial of Prader-Willi syndrome, a rare disease. Prior to Levo, between October 2017 and July 2018, Ritu was the Chief of Staff to the CEO and Vice President of Program Management for AveXis, a biotech gene therapy company focusing on SMA, and led the integration following its acquisition by Novartis. Between June 2016 and October 2017, Ritu was at Shire, where she was the Senior Director of Business Operations and Head of Business Operations. She spent 7 years between November 2009 and May 2016 at Baxter and Baxalta in various executive

roles leading patient advocacy, commercial, research and development, supply chain, and global operations. Ritu started her career at Accenture where she spent over a decade in management consulting focusing on R&D and supply chain projects across manufacturers, wholesalers, and retailers.

Ritu earned her B.Sc. from University of Notre Dame in the Department of Chemical Engineering and graduated summa cum laude. Ritu is certified as a Project Management Professional, PMP. Ritu is also involved in her community and serves as a board member of an entrepreneurial incubator program.

Non-Employee Directors

David Steinberg joined us in November 2018 and has served as a member of our board of directors since June 2019. He is one of our co-founders, Chairman and founding CEO and has also served as a General Partner at Longwood Fund since September 2018. Previously, between 2002 and 2018, David was co-founder and Chief Innovation Officer at PureTech Health, where he focused on biotech venture creation and investing. Prior to joining PureTech Health, he was a strategy consultant with Vertex Partners and the Boston Consulting Group, where he focused on research and development and product strategy and strategic alliances for pharmaceutical and biotechnology clients. David has co-founded and served as CEO and founder of several biotech companies, including Vor Biopharma, Be Biopharma, Vedanta Biosciences, Endra Life Sciences Inc., and Entrega Biosciences, and co-founded ResTORbio. He received his M.B.A. from the University of Chicago Booth School of Business and holds a B.A. in biology from Cornell University.

We believe that David is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, knowledge of our operations, and his leadership experience in other companies in our industry.

John Flavin joined us in June 2018 and has served as a member of our board of directors since May 2019. He is one of our co-founders, founding Chairman and an independent director. He is also the Founder and CEO of Portal Innovations, a life sciences venture development engine. Prior to joining us, between April 2018 and February 2020, John was the Chief Financial Officer at Endotronix, Inc. Between September 2013 and April 2018, John was the Head of the Polsky Center for Entrepreneurship and Innovation and the University of Chicago. John has over 20 years of experience in finance, operations, and innovation. John has co-founded and scaled several life sciences companies as President and CFO such as Advanced Life Sciences and MediChem Life Sciences. Mr. Flavin has also co-founded and led transformative life sciences incubators including MATTER and the Polsky Center for Entrepreneurship and Innovation at the University of Chicago. He received his B.S. in Business Administration from Marquette University and his M.B.A. in Finance from Lewis University.

We believe that Mr. Flavin is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, knowledge of our operations and his leadership experience in other companies in our industry.

Lucio Iannone, Ph.D., has served as a member of our board of directors since July 2019 and is an investor at Leaps by Bayer, the investment arm of the global life sciences company Bayer. Lucio started at Leaps by Bayer in 2018 and is responsible for developing investment cases and deal execution. He is also involved in the sourcing, screening, and mentoring of companies with game-changing science. As an investor, Lucio is also serving as board member for Khloris Biosciences, Vesigen Therapeutics, Immunitas Therapeutics, eGenesis, Azitra, Kojin Therapeutics and Axxam. Between 2015 and 2018, he served as Head of Business Development at Silence Therapeutics, starting in 2015. He has experience with molecular biology, cell & gene therapy technologies and their application in oncology and other therapeutic fields. Lucio obtained his Ph.D. in Medicine at the Imperial College of London.

We believe that Lucio is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, his leadership experience in other companies in our industry and his educational background.

Gotham Makker, M.D., has served as a member of our board of directors since March 2021. Dr. Makker has over 17 years of healthcare industry experience. Dr. Makker currently serves as head of Strategic Investments for RTW Investments, LP ("RTW"), a position he has held since 2019. From 2005 to 2019, he served as Chief Executive Officer of Simran Investment Group, LLC, a closely held equity investment fund. Prior to Simran, Dr. Makker was a healthcare portfolio manager and principal at Citadel Investment Group LLC, a position he held from 2002 to 2005. Prior to joining Citadel, Dr. Makker served as an analyst at Oracle Partners LP covering biotechnology and medical device sectors from 2000 to 2001. From 1999 to 2000, Dr. Makker was a senior analyst on the life sciences investment banking team at Hambrecht & Quist. Dr. Makker has previously served on the board of directors of Health Sciences Acquisitions Corporation. Gotham serves on the board of directors of Rocket Pharmaceuticals.

Gotham received his M.D. from the University of Nebraska Medical School, and he completed the Sarnoff cardiovascular research fellowship at Columbia University, College of Physicians & Surgeons and at Harvard Medical School, Brigham & Women's Hospital.

We believe that Gotham is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, his financial expertise, and his educational background.

Christopher O'Donnell, Ph.D., has served as a member of our board of directors since March 2021 and is a Partner at Pfizer Ventures and Executive Director at Pfizer Worldwide Research, Development & Medical. Chris began at Pfizer in July 1999 and has over 20 years of experience and scientific leadership there. Prior to Pfizer Ventures, Chris developed and led the Applied Synthesis Technologies group within Pfizer Worldwide Research & Development organization to accelerate the delivery of Pfizer's small molecule portfolio. Prior to that, Chris developed and led Pfizer's Antibody Drug Conjugate Oncology Medicinal Chemistry group which delivered new linker, payload and conjugation methods resulting in 7 conjugates entering clinical development for many different cancer indications and this technology is at the foundation of PYX-201 and PYX-203. Chris started his career in the Neuroscience Medicinal Chemistry group where he invented and helped deliver numerous clinical candidates, with the most advanced being the AMPA positive allosteric modulator in Phase 2 that was licensed to Biogen. Chris has co-authored 60 peer reviewed manuscripts and is the inventor/co-inventor on 25 patents.

Chris earned his B.S. in Chemistry from the University of Illinois-Urbana/Champaign and his Ph.D. in Chemistry from the University of Wisconsin-Madison and joined Pfizer after his post-doctoral research studies as an American Cancer Society Fellow at the University of California—Irvine.

Within Pfizer Ventures Chris is responsible for identifying, evaluating, making and managing equity investments aligned with the future directions of Pfizer. He currently serves on the boards of Adapsyn Biosciences, ARKUDA Therapeutics, Pyxis Oncology, Storm Therapeutics (UK) and Strata Oncology. Chris previously served on the boards of Kymera Therapeutics (KYMR) and was a board observer of BioAtla Inc. (BCAB), Mitokinin, Morphic Therapeutic (MORF) and Petra Therapeutics.

We believe that Chris is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, his leadership experience in other companies in our industry and his educational background.

Mark Chin has served as a member of our board of directors since July 2021 and is an experienced venture capital investor who serves as Managing Director of Arix Bioscience. Mark started at Arix Bioscience in August 2016 and has led Arix investments into key portfolio companies, including VelosBio (acquired by Merck), Amplyx Pharmaceuticals (acquired by Pfizer), Aura Biosciences, Harpoon Therapeutics and Imara. Previously, between September 2012 and August 2016, Mark was a principal at Longitude Capital where he focused on investments in biotechnology and medical technology companies. Prior to Longitude, from January 2011 to September 2012, Mark was a consultant at the Boston Consulting Group, where he was responsible for strategy and corporate development projects for pharmaceutical and biotechnology companies. Before that, Mark worked in corporate development at Gilead Sciences and market planning at Genentech. Mark currently serves on the

board of directors for Harpoon Therapeutics, Inc., Imara Inc., Iterum Therapeutics plc, Artios Pharma and several other private biotechnology companies.

Mark received an M.B.A from The Wharton School at the University of Pennsylvania, an M.S in Biotechnology from the University of Pennsylvania, and a B.S. in Management Science from the University of California at San Diego.

We believe that Mark is qualified to serve on our board of directors because of his extensive expertise and experience in the life sciences industry, his leadership experience in other companies in our industry and his educational background.

Freda Lewis-Hall, M.D. has served as a member of our board of directors since September 2021. Starting in November 2019, Dr. Lewis-Hall has served as a director at 1Life Healthcare, Inc. Since January 2019, Dr. Lewis-Hall has also served as Chief Patient Officer and Executive Vice President of Pfizer Inc. From 2009 to January 2019, Dr. Lewis-Hall served as Pfizer's Chief Medical Officer. Prior to joining Pfizer in 2009, Dr. Lewis-Hall held various senior leadership positions including Chief Medical Officer and Executive Vice President, Medicines Development at Vertex Pharmaceuticals, Inc., from June 2008 to May 2009, and Senior Vice President, U.S. Pharmaceuticals, Medical Affairs for Bristol-Myers Squibb Co. from 2003 to May 2008. Since August 2017, Dr. Lewis-Hall has served on the board of directors of SpringWorks Therapeutics, Inc., a biopharmaceutical company. From December 2014 to May 2017, she served on the board of directors of Tenet Healthcare Corporation, a healthcare services company. Dr. Lewis-Hall earned a B.A. in Natural Sciences from Johns Hopkins University and an M.D. from Howard University College of Medicine.

We believe that Dr. Lewis-Hall is qualified to serve on our board of directors based on her expertise and experience in the life sciences industry and her leadership experience as a senior executive at various biopharmaceutical companies as well as her educational background.

Thomas Civik has served as a member of our board of directors since September 2021. Since April 2020, he has served as President, Chief Executive Officer and a member of the board of directors at Five Prime Therapeutics, Inc. From November 2017 until September 2019, Mr. Civik served as Chief Commercial Officer of Foundation Medicine, Inc., a genomic profiling and molecular information company. From December 2000 to November 2017, Mr. Civik served in positions of increasing responsibility at Genentech, Inc., or Genentech, most recently serving as Vice President and Franchise Head leading the commercialization efforts for the Avastin®, Tarceva®, Tecentriq®, and Alecensa®, products. From July 1992 to December 2000, he served at Sanofi S.A. in sales and marketing roles of increasing responsibility. Mr. Civik received an M.B.A. in business strategy and marketing from the Kellogg School of Management at Northwestern University and a B.A. in political science from Saint Norbert College.

We believe that Mr. Civik is qualified to serve on our board of directors because of his extensive commercial expertise and leadership experience at other biotechnology companies.

Darren Cline has served as a member of our board of directors since September 2021. Since April 2019, he has served as the U.S. Chief Commercial Officer and member of the Executive Committee for Greenwich Bioscience, the U.S. subsidiary of GW Pharmaceuticals. Between October 2010 and March 2019, Mr. Cline served as Executive Vice President, Commercial at Seattle Genetics, Inc., where he oversaw all marketing, sales, and managed markets. He was directly involved in the commercial build out for the launch of Adcetris, an antibody-based biologic the FDA approved for treatment of certain hematologic cancers and played an integral role driving Adcetris's continued growth. Prior to Seattle Genetics, between October 2006 and October 2009, Mr. Cline was at Alexion Pharmaceuticals, where he was part of the initial commercial leadership team for the Soliris launch, helping to build out key sales functions. Mr. Cline received his undergraduate degree from San Diego State University and his MBA from Pepperdine University.

We believe that Mr. Cline is qualified to serve on our board of directors because of his management experience and background in the biotechnology sector.

Family Relationships

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

Corporate Governance

Classified Board of Directors

Upon the completion of this offering, our board of directors will consist of six members and be divided into three classes of directors that will serve staggered three-year terms. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring. 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. David Steinberg, Lucio Iannone Ph.D., Gotham Makker M.D. and Christopher O'Donnell Ph.D. will resign as directors immediately prior to the effectiveness of the registration statement on Form S-1, of which this prospectus forms a part. John Flavin will become the Chairman of the Board immediately prior to the effectiveness of the registration statement on Form S-1, of which this prospectus forms a part. Our directors will be divided among the three classes as follows:

- the Class I directors will be , and their terms will expire at the first annual meeting of stockholders to be held after the completion of this offering;
- the Class II directors will be , and their terms will expire at the second annual meeting of stockholders to be held after the completion of this offering; and
- the Class III directors will be , and their terms will expire at the third annual meeting of stockholders to be held after the completion of this 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 certificate of incorporation and bylaws to be in effect upon the completion of this offering will 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."

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 after 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.

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.

Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under 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: accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or 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.

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, with the exception of our Chief Executive Officer, Lara Sullivan, M.D., and David Steinberg, each member of our board of directors is an "independent director" as defined under the applicable rules and regulations of the SEC and the listing requirements and rules of Nasdaq. In making these determinations, our board of directors reviewed and discussed information provided by the directors and by 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 common stock by each non-employee director and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and governance committee prior to the completion of this offering, each of which will operate pursuant to a charter adopted by our board of directors and which will be effective prior to the consummation of this offering. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Our board of directors may establish other committees as it deems necessary or appropriate from time to time. Following the completion of this offering, copies of the charters for each committee will be available on our website. Reference to our website does not constitute incorporation by reference of the information contained at or accessible through our website into this prospectus or the registration statement of which it forms a part.

Audit Committee

Our audit committee consists of Mr. Flavin, Mr. Civik and Mr. Cline, with Mr. Flavin serving as the chairperson. Our board of directors has determined that each member of our audit committee is independent within the meaning of Rule 10A-3 under the Exchange Act. Our board of directors has also determined that Mr. Flavin is an "audit committee financial expert" as defined by the applicable SEC rules and has the requisite accounting or related financial management expertise and financial sophistication under the applicable rules and regulations of Nasdaq.

Specific responsibilities of our audit committee will include:

- overseeing our corporate accounting and financial reporting processes and our internal controls over financial reporting;
- evaluating the independent public accounting firm's qualifications, independence and performance;
- engaging and providing for the compensation of the independent public accounting firm;
- pre-approving audit and permitted non-audit and tax services to be provided to us by the independent public accounting firm;
- reviewing our financial statements;
- reviewing our critical accounting policies and estimates and internal controls over financial reporting;
- establishing procedures for complaints received by us regarding accounting, internal accounting controls or auditing matters, including for the confidential anonymous submission of concerns by our employees, and periodically reviewing such procedures, as well as any significant complaints received, with management;
- discussing with management and the independent registered public accounting firm the results of the annual audit and the reviews of our quarterly financial statements;

- review and approve any transaction between us and any related person (as defined by the Securities Act) in accordance with the Company's related party transaction approval policy; and
- such other matters that are specifically designated to the audit committee by our board of directors from time to time.

Our audit committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable Nasdaq listing standards.

Compensation Committee

Our compensation committee consists of Mr. Civik, Mr. Flavin and Mr. Chin, with Mr. Civik serving as the chairperson. Our board of directors has determined that each member of our compensation committee is independent under the Nasdaq listing standards and a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act.

Specific responsibilities of our compensation committee will include:

- reviewing and recommending policies relating to compensation and benefits of our officers and employees, including reviewing and approving corporate goals and objectives relevant to compensation of the Chief Executive Officer and other senior officers;
- evaluating the performance of the Chief Executive Officer and other senior officers in light of those goals and objectives;
- setting compensation of the Chief Executive Officer and other senior officers based on such evaluations;
- administering the issuance of options and other awards under our equity-based incentive plans;
- reviewing and approving, for the Chief Executive Officer and other senior officers, employment agreements, severance agreements, consulting agreements and change in control or termination agreements; and
- such other matters that are specifically designated to the compensation committee by our board of directors from time to time.

Our compensation committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable Nasdaq listing standards.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Mr. Cline, Dr. Lewis-Hall and Mr. Chin, with Mr. Cline serving as the chairperson. Our board of directors has determined that each member of our nominating and corporate governance committee is independent under the applicable Nasdaq listing standards.

Specific responsibilities of our nominating and corporate governance committee will include:

- identifying and evaluating candidates, including the nomination of incumbent directors for reelection and nominees recommended by stockholders, to serve on our board of directors;
- considering and making recommendations to our board of directors regarding changes to the size and composition of our board of directors;
- considering and making recommendations to our board of directors regarding the composition and chairmanship of the committees of our board of directors;
- instituting plans or programs for the continuing education of our board of directors and orientation of new directors;

- establishing procedures to exercise oversight of, and oversee the performance evaluation process of, our board of directors and management;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- overseeing periodic evaluations of the board of directors' performance, including committees of the board of directors.

Our nominating and corporate governance committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable Nasdaq listing standards.

Code of Ethics and Business Conduct

We have adopted a code of conduct applicable to our principal executive, financial and accounting officers and all persons performing similar functions. Upon the effectiveness of the registration statement of which this prospectus forms a part, our code of conduct will be available on our principal corporate website at www.pyxisoncology.com. Information contained on our website or connected thereto does not constitute a part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee is or has been an officer or employee of us or any of our subsidiaries. In addition, none of our executive officers serves or has served as a member of the board of directors, compensation committee or other board committee performing equivalent functions of any entity that has one or more executive officers serving as one of our directors or on our compensation committee.

Director Compensation

During 2020, members of our board of directors did not receive any retainer fees or other cash or equity-based compensation for their services as a director or otherwise from the Company, other than reimbursements for out-of-pocket expenses incurred in connection with rendering such services. In connection with the offering, we engaged Pearl Meyer & Partners, LLC, an independent compensation consultant, to assist with the evaluation of our post-offering non-employee director compensation program.

Limitations on Director and Officer Liability and Indemnification

Our amended and restated certificate of incorporation that will become effective in connection with this offering will contain provisions that will 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 amended and restated certificate of incorporation and our bylaws that will become effective in connection with this offering will require us to indemnify our directors and officers, and allow us to indemnify other employees and agents, to the fullest extent permitted by the DGCL. Subject to certain limitations and

limited exceptions, our amended and restated certificate of incorporation will also require us to advance expenses incurred by our directors and officers for the defense of any action for which indemnification is required or permitted.

We have entered into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and our amended and restated certificate of incorporation.

We believe that these provisions in our amended and restated certificate of incorporation, bylaws and indemnification agreements are necessary to attract and retain qualified persons such as directors, officers and key employees. We also maintain directors' and officers' liability insurance. The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breaches of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process. The board of directors does not have a standing risk management committee, but rather administers this oversight function directly through the board of directors as a whole, as well as through its standing committees that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure. Our audit committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The audit committee also monitors compliance with legal and regulatory requirements, in addition to oversight of the performance of our external audit function. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance guidelines. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

EXECUTIVE COMPENSATION

The following is a discussion and analysis of compensation arrangements of our named executive officers. This discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion. As an "emerging growth company" as defined in the JOBS Act, we are not required to include a Compensation Discussion and Analysis section and have elected to comply with the scaled disclosure requirements applicable to emerging growth companies.

Overview

Compensation decisions for our executive officers have historically been made by our Board of Directors, based on the recommendations of the Compensation Committee of our Board of Directors. We expect that our executive compensation program will evolve to reflect our status as a public company and market practices. In 2021, the Board of Directors engaged Pearl Meyer & Partners, LLC, an independent compensation consultant, to assist it in its evaluation of our executive compensation program.

Our current executive compensation program is intended to align executive compensation with our business objectives and to enable us to attract, retain and reward executive officers who contribute to our long-term success. The compensation paid or awarded to our executive officers is generally based on the assessment of each individual's performance compared against the business objectives established for the fiscal year as well as our historical compensation practices. In the case of newly hired executive officers, their compensation is primarily determined based on the negotiations of the parties as well as our historical compensation practices. For 2020, the material elements of our executive compensation program were base salary, annual cash bonuses and equity-based compensation in the form of stock options.

This section provides a discussion of the compensation paid or awarded to our Chief Executive Officer and our two other most highly compensated executive officers as of December 31, 2020. We refer to these individuals as our "named executive officers." For 2020, our named executive officers were:

- Lara Sullivan, M.D., Chief Executive Officer;
- Robert Crane, Former Chief Financial Officer;* and
- Ronald Herbst, Ph.D., Chief Scientific Officer.

* Mr. Crane ceased serving as our Chief Financial Officer and separated from the Company in August 2021, with Ms. Pamela Connealy assuming the role of Chief Financial Officer of the Company, effective July 19, 2021. Other than the acceleration of vesting of certain equity awards, which is contingent upon completion of the IPO, Mr. Crane did not receive any separation benefits from the Company.

Compensation of Named Executive Officers

Base Salary. Base salaries are intended to provide a level of compensation sufficient to attract and retain an effective management team, when considered in combination with the other components of our executive compensation program. The relative levels of base salary for Drs. Sullivan and Herbst are designed to reflect each executive officer's functional specialty and scope of responsibility and accountability with us. In lieu of base salary, Mr. Crane received consulting fees in the amount of $2,500 per day, up to a maximum of $25,000 per month. In connection with this offering, the Company entered into an amended employment letter agreement with Dr. Sullivan which increased her annual base salary to $565,000. Please see the "Salary" column in the 2020 Summary Compensation Table for the base salary amounts earned by Drs. Sullivan and Herbst and the consulting fees earned by Mr. Crane in 2020.

Annual Cash Bonuses. Historically, we have provided our senior leadership team with short-term incentive compensation through our annual cash bonus plan. Annual bonus compensation holds executives accountable, rewards the executives based on actual business results and helps create a "pay for performance" culture. Our annual cash bonus plan provides cash incentive award opportunities for the achievement of annual performance goals established by our Board of Directors at the beginning of each fiscal year.

The payment of awards under the 2020 annual cash bonus plan applicable to the named executive officers was subject to the attainment of corporate goals for our Chief Executive Officer and a combination of corporate and individual goals, weighted 75% and 25%, respectively, for our other named executive offices. The corporate component of the annual cash bonus plan was determined based on a number of goals relating to (i) development of our product pipeline, weighted 55% with a stretch goal of up to 10%, (ii) business development and finance objectives, weighted 30% with a stretch goal of up to 10% and (iii) organization and operations goals, weighted 15%. The individual goals for Mr. Crane and Dr. Herbst were pre-established goals determined based on their functional areas of responsibility.

Early in 2020, the Board of Directors established bonus targets for each participant in the annual bonus plan, including each of the named executive officers. The 2020 target bonus, as a percentage of 2020 earnings, was 40% for Dr. Sullivan and 35% for Mr. Crane and Dr. Herbst. Based on our 2020 performance, the Board of Directors awarded payouts under our annual cash bonus program in a total payout of 120% of the target bonus opportunity. In connection with this offering, the Company entered into an amended employment letter agreement with Dr. Sullivan which increased the amount of her target annual bonus to 55% of base salary. Please see the "Non-Equity Incentive Compensation" column in the 2020 Summary Compensation Table for the amount of annual bonuses earned by each named executive officer in 2020.

Stock Options. To further align the interests of our executive officers with the interests of our stockholders and to further focus our executive officers on our long-term performance, we have historically granted equity compensation in the form of stock options. Stock options granted to the named executive officers generally vest 25% on the one-year anniversary of the vesting commencement date and then in 36 equal monthly installments over the next three years. In July 2020, the stock option awards held by each named executive officer were amended to include a feature allowing the executive officer to exercise the option prior to vesting and receive restricted stock subject to the same vesting conditions as the option. In 2020, the Board of Directors awarded Mr. Crane stock options to purchase 473,641 shares of our common stock. Vesting of these options commenced as of Mr. Crane's first day of service with the Company and the options will vest 25% on the first anniversary of the vesting commencement date and in 36 equal monthly installments thereafter, subject to Mr. Crane's continuous service with the Company through each applicable vesting date. None of our other named executive officers received option awards in 2020. In 2020, each of our named executive officers elected to early exercise their outstanding stock options for restricted stock.

With the exception of certain option grants awarded to Mr. Crane in 2021, the vesting of outstanding stock options and restricted stock awards will not accelerate in connection with this offering. In 2021, Mr. Crane was granted option awards with respect to 1,574,586 shares of our common stock. Under the terms of the award agreement the option will vest in 48 monthly installments starting from Mr. Crane's first day of service with the Company and subject to Mr. Crane's continuous service with the Company through each applicable vesting date. Further, under the terms of the award agreement, out of 1,574,586 stock options, 296,736 shares of our common stock will accelerate vesting upon the closing the Company's initial public offering, or "First Tranche Shares," and additional 296,736 shares of our common stock will accelerate vesting if the Company's initial public offering occurs on or before October 15, 2021. The First Tranche Shares will also vest if Mr. Crane's service to the Company terminates but the Company's initial public offering occurs (i) within 90 days of the date such service has terminated or (ii) on or before October 15, 2021. Mr. Crane ceased serving as our Chief Financial Officer and separated from the Company in August 2021, at that time 725,414 shares of our common stock and restricted stock was vested. Drs. Sullivan and Herbst also received option grants in March 2021 with respect to 6,298,343 shares and 1,889,503 shares, respectively, vesting in 48 monthly installments based on the recipient's

continued service through the applicable vesting date. In addition, Drs. Sullivan and Herbst were granted options with respect to 393,146 and 65,524 shares, respectively, in September 2021, which vest 25% on the one-year anniversary of the date of the closing of the IPO and then in 36 equal monthly installments over the next three years.

In January 2021, the Board of Directors amended the vesting schedules applicable to the stock options held by Drs. Sullivan and Dr. Herbst. Under the original vesting schedule applicable to her options, Dr. Sullivan's options were to vest 25% on the one-year anniversary of the vesting commencement date and in 48 equal monthly installments thereafter, subject to Dr. Sullivan's continued service through the applicable vesting date. Under the amended vesting schedule, Dr. Sullivan's options will vest 25% on the one-year anniversary of the vesting commencement date and then in 36 equal monthly installments thereafter, subject to Dr. Sullivan's continued service through the applicable vesting date. The Board of Directors also eliminated a vesting condition applicable to 75,000 shares subject to Dr. Herbst's options, which provided that vesting with respect to such shares would commence only after Dr. Herbst had spent a total of six months with substantially all of his work efforts being either on-site with the Company or on Company-related travel.

Please see the Outstanding Equity Awards at 2020 Fiscal Year-End table for a summary of the equity awards held by each named executive officer as of December 31, 2020.

2020 Summary Compensation Table

The following table shows information regarding the compensation of our named executive officers for services performed in the year ended December 31, 2020:

Name and Principal Position	Year	Salary ($)(1)	Bonus ($)	Option Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)(3)	All Other Compensation ($)	Total ($)
Lara Sullivan, M.D., *Chief Executive Officer*	2020	375,000	—	—	180,000	—	555,000
Robert Crane, *Former Chief Financial Officer*	2020	245,625	—	4,736	103,163	—	358,524
Ronald Herbst, Ph.D., *Chief Scientific Officer*	2020	330,000	—	—	138,600	—	468,600

(1) The amount reported in this column for Mr. Crane represents consulting fees paid to him pursuant to his consulting agreement.
(2) Amounts reported in this column reflect the aggregate grant date fair value of stock options awarded in 2020, computed in accordance with FASB ASC Topic 718, Compensation—Stock Compensation based on the following assumptions: risk-free interest rate of 0.56%; expected volatility of 81.0%; expected term of 6.02 years and expected dividend rate of 0%.
(3) Amounts reported in this column represent annual incentive bonuses that were paid based on the achievement of corporate and, in the case of Mr. Crane and Dr. Herbst, individual performance goals in 2020. Please see the description above under "Annual Cash Bonuses" for further information regarding the 2020 bonuses.

Outstanding Equity Awards at 2020 Fiscal Year-End

The following table presents information regarding the outstanding restricted stock held by each of the named executive officers as of December 31, 2020. As noted above, in July 2020, each named executive officer exercised his or her outstanding options for restricted stock of the Company. None of the named executive officers held any other equity awards as of December 31, 2020.

Name	Grant Date	Vesting Commencement Date	Number of Shares or Units of Stock That Have Not Vested (#)(1)	Market Value of Shares or Units of Stock That Have Not Vested ($)(2)
Lara Sullivan, M.D.	12/06/2019	12/02/2019	1,425,000	498,750
Robert Crane(3)	04/08/2020	03/16/2020	473,641	165,774
Ronald Herbst, Ph.D.	12/06/2019	08/21/2019	383,333	134,167

(1) The shares reported in this column vest 25% on the one-year anniversary of the vesting commencement date and then in 1/48 monthly installments over the next three years, subject to the named executive officer's continued employment through the applicable vesting date. These options were amended in July 2020 to include a feature allowing the executive officer to exercise the option prior to vesting, with each of the executive officers electing to early exercise the stock option and receive restricted stock subject to the same vesting conditions as the underlying shares. Please see the description above under "Stock Options" for further information regarding the vesting schedules applicable to Drs. Sullivan and Herbst's options prior to January 2021.

(2) As of December 31, 2020, our common stock was not publicly traded and, therefore, there is no ascertainable public market value for the shares as of December 31, 2020. The market value reported in this table is based upon the most recent Section 409A valuation of a share of common stock obtained prior to December 31, 2020.

(3) Mr. Crane separated from the Company in August 2021.

Employment Agreements, Severance and Change in Control Agreements

We entered into employment or service agreements with each of the named executive officers. These agreements set forth the initial terms and conditions of each executive's employment with us, including base salary, target annual bonus opportunity and standard employee benefit plan participation. Except as noted below, these employment agreements provide for "at will" employment.

In connection with this offering, we expect to enter into new employment agreements with the Company's named executive officers that will set forth the terms of their employment, including base salary and annual bonus target levels, following this offering. In addition, the employment agreements are expected to provide for severance benefits. The severance benefits under the employment agreements will be subject to the named executive officer's execution of a release of claims in favor of the Company and compliance with restrictive covenants relating to non-competition, non-solicitation and confidentiality. We will include a description of such employment agreements in a subsequent amendment to the registration statement of which this prospectus forms a part.

Lara Sullivan, M.D.

We entered into an employment letter agreement with Dr. Sullivan in October 2019, which agreement was subsequently amended in September 2021 in connection with this offering. Dr. Sullivan's amended letter agreement provides that, on the day before the first to occur of the date on which (i) the Company has registered a class of securities pursuant to Section 12(b) or subject to Section 15(d) of the Exchange Act, or (ii) the Company is subject to the periodic and current reporting requirements of Section 13 or 15(d) of the Exchange Act, Dr. Sullivan will be granted an option award with respect to a number of shares of our common stock such that the aggregate number of shares subject to such option and the option awards previously granted to Dr. Sullivan will equal 6% of the total outstanding shares of the Company as of such date, on a fully diluted basis. Two-thirds of the shares subject to such option will vest 25% on the first anniversary of the grant date and

in 36 equal monthly installments thereafter and one-third of the shares will vest on the fourth anniversary of the grant date.

Under the terms of the amended letter agreement, in the event that Dr. Sullivan is terminated by us for any reason other than for "cause" or she terminates her employment for "good reason," she will be entitled to receive, upon execution and effectiveness of a release of claims, base salary for a period of twelve (12) months and up to twelve (12) months of continued health insurance coverage at the Company's expense. In addition, in the event of termination by us for any reason other than for "cause" or due to good reason within three (3) months before or twelve (12) months following a change of control of the Company, subject to the execution and non-revocation of a release of claims, (i) Dr. Sullivan will receive a cash payment in an amount equal to the sum of twelve (12) months' base salary and Dr. Sullivan's target annual bonus, payable in a lump sum unless required to be paid in installments to comply with Section 409A of the Code, (ii) up to twelve (12) months of continued health insurance coverage at the Company's expense, and (iii) any unvested portions of the option awards granted to Dr. Sullivan on December 6, 2019 and March 2021 (the "Initial Equity Awards") will immediately vest in full on the date of termination. Dr. Sullivan's amended letter agreement also provides for any unvested portion of the Initial Equity Awards to fully vest in the event of a change in control in which neither the Company nor its successor entity (if applicable) assumes, substitutes or continues the unvested portion of such award. In the event that we terminate Dr. Sullivan with cause or she resigns without good reason, then she will not be entitled to receive severance benefits. Dr. Sullivan's letter agreement also contains IP assignment obligations.

Robert Crane

We entered into a consulting agreement with Mr. Crane on March 13, 2020, which set forth the basic terms of his service with the Company. Mr. Crane was not eligible for severance benefits under the terms of that consulting agreement. Either Mr. Crane or the Company could have terminated the consulting agreement at any time without cause upon at least thirty (30) days written notice to the other party. Pursuant to the terms of his consulting agreement, in April 2020 Mr. Crane was granted an option to purchase shares equivalent to 1.0% of the fully diluted capitalization of the Company, which was scheduled to vest 25% on the one-year anniversary of Mr. Crane's first day of service with us and in 36 equal monthly installments thereafter. In addition, upon the closing of an equity offering, initial public offering, non-dilutive collaboration transaction, convertible debt or debt offering resulting in gross proceeds to the Company of at least $20 million and/or a change of control of the Company, Mr. Crane was entitled to receive an option to purchase shares equivalent to 0.25% of the fully diluted capitalization of the Company. This obligation was fulfilled upon the completion of our Series B financing and the option will vest 25% on the first anniversary of Mr. Crane's first day of service with the Company and in 36 equal monthly installments thereafter, subject to Mr. Crane's continuous service with the Company through each applicable vesting date. In 2020, Mr. Crane elected to early exercise this stock option for restricted stock, subject to the same vesting schedule as the underlying stock option. The consulting agreement contained a perpetual confidentiality covenant, IP assignment obligations and a non-solicitation covenant and non-competition covenant during the consulting period and for six (6) months following the consulting period.

Mr. Crane ceased serving as our Chief Financial Officer and separated from the Company in August 2021. Other than a stock option award that remains eligible for continued vesting in connection with the completion of our initial public offering, as described above, Mr. Crane did not receive any separation benefits from, and did not enter into a separation agreement with, the Company.

Ronald Herbst, Ph.D.

We entered into an employment letter agreement with Dr. Herbst in August 2019. Under the terms of the letter agreement, in the event that Dr. Herbst is terminated by us without "cause," he will be entitled to receive, upon execution and effectiveness of a release of claims, base salary for a period of six (6) months. In addition, in the event of termination without cause or due to good reason within twelve (12) months following a change of control of the Company, (i) Dr. Herbst will receive base salary for a period of twelve (12) months and (ii) the unvested portions of the stock option award granted to Dr. Herbst in December 2019 will immediately vest in full

on the date of termination. In the event that we terminate Dr. Herbst with cause or he resigns without good reason, then he will not be entitled to receive severance benefits. Dr. Herbst's letter agreement also contains IP assignment obligations.

Pamela Connealy

In connection with her appointment to the position of Chief Financial Officer, the Company and Ms. Connealy entered into an employment letter agreement setting forth the initial terms of her employment with the Company. Under the letter agreement, Ms. Connealy will receive an annual base salary of $430,000 and will be eligible for an annual bonus equal to 40% of her base salary, with the actual bonus to be paid based on the achievement of pre-determined performance milestones. Under the terms of the letter agreement, Ms. Connealy also received an option to purchase 1.25% of shares of the Company's common stock (the "Initial Option Grant"), vesting 25% on the first anniversary of Ms. Connealy's start date, and thereafter in 36 equal, monthly installments, subject to her continued employment through the applicable vesting date. In addition, the letter agreement provides that on the 60th day following the first to occur of the date on which (i) the Company has registered a class of securities pursuant to Section 12(b) or subject to Section 15(d) of the Exchange Act, or (ii) the Company is subject to the periodic and current reporting requirements of Section 13 or 15(d) of the Exchange Act (each such date, the "Measurement Date"), Ms. Connealy will be granted an additional option to purchase the number of shares of Company common stock such that the number of shares subject to this option plus the number of shares subject to the Initial Option Grant will equal 1% of the total outstanding shares of the Company on the Measurement Date (the "Additional Option Grant"), subject to a Market Cap Limitation described below. The term "Market Cap Limitation" means, if the Measurement Date is on or before the nine-month anniversary of Ms. Connealy's employment commencement date, a Market Cap (as defined below) of $1,000,000,000, or if the Measurement Date is after the nine-month anniversary of the employment commencement date, a Market Cap of $2,000,000,000. The term "Market Cap" means, as calculated on a daily basis during the 60-day period ending on the Measurement Date, the averages of the closing per share price of the Company's common stock multiplied by the number of outstanding shares of the Company as of such day. If the Company exceeds the applicable Market Cap Limitation, then the Additional Option Grant will be reduced (if any) so that the Black-Scholes value of the Initial Option Grant and the Additional Option Grant is equal to 1% of the applicable Market Cap Limitation. Any Additional Option Grant will vest on the same basis as the Initial Option Grant.

Under the terms of the letter agreement, in the event that Ms. Connealy is terminated by us without "cause" or due to disability or she terminates her employment for "good reason," she will be entitled to receive, upon execution and effectiveness of a release of claims, base salary for a period of nine (9) months and up to nine (9) months of COBRA premiums. In addition, in the event of termination by the Company for any reason other than for cause or Ms. Connealy's resignation due to good reason within three (3) months before or twelve (12) months following a change of control of the Company, Ms. Connealy will receive a lump sum payment equal to twelve (12) months of base salary plus Ms. Connealy's target annual bonus, payable in a single lump sum on the 60th day following such termination of employment, and up to twelve (12) months of COBRA premiums Under the terms of the letter agreement, if the payments and benefits to Ms. Connealy under the letter agreement or another plan, arrangement or agreement would subject her to the excise tax imposed by Section 4999 of the Internal Revenue Code, then such payments will be reduced by the minimum amount necessary to avoid such excise tax, but only if such reduction will result in Ms. Connealy receiving a higher net after-tax amount.

Jay Feingold, M.D.

On August 19, 2021, we entered into an employment letter agreement with Jay Feingold, M.D., our Chief Medical Officer. Dr. Feingold's letter agreement provides that, in connection with his commencement of employment, he will be granted an option to purchase 1,000,000 shares of our common stock, which option will vest 25% on the first anniversary of his start date and in 36 equal monthly installments thereafter. Dr. Feingold's letter agreement also entitles Dr. Feingold to receive a restricted stock unit award with a value of $700,000 at the

time of the Company's initial public offering, which award will vest 25% on the first anniversary of his start date and in 36 equal monthly installments thereafter. In addition, Dr. Feingold's letter agreement provides that, on the day before the first to occur of the date on which (i) the Company has registered a class of securities pursuant to Section 12(b) or subject to Section 15(d) of the Exchange Act, or (ii) the Company is subject to the periodic and current reporting requirements of Section 13 or 15(d) of the Exchange Act, Dr. Feingold will be granted an option award with respect to a number of shares of our common stock such that the aggregate number of shares subject to such option and the option and restricted stock unit awards previously granted to Dr. Feingold will equal 1.7% of the total outstanding shares of the Company as of such date, on a fully diluted basis. Shares subject to such option will vest 25% on the first anniversary of the grant date and in 36 equal monthly installments thereafter.

Under the terms of the letter agreement, in the event that Dr. Feingold is terminated by us for any reason other than for "cause" or he terminates his employment for "good reason," he will be entitled to receive, upon execution and effectiveness of a release of claims, base salary for a period of nine (9) months and up to nine (9) months of continued health insurance coverage at the Company's expense. In addition, in the event of termination by us for any reason other than for "cause" or due to good reason within three (3) months before or twelve (12) months following a change of control of the Company, subject to the execution and non-revocation of a release of claims, (i) Dr. Feingold will receive a cash payment in an amount equal to the sum of twelve (12) months' base salary and Dr. Feingold's target annual bonus, payable in a lump sum unless required to be paid in installments to comply with Section 409A of the Code, (ii) up to twelve (12) months of continued health insurance coverage at the Company's expense, and (iii) all unvested equity awards will immediately vest in full on the date of termination. Dr. Feingold's letter agreement also provides for any unvested equity award to fully vest in the event of a change in control in which neither the Company nor its successor entity (if applicable) assumes, substitutes or continues the unvested portion of such award. In the event that we terminate Dr. Feingold with cause or he resigns without good reason, then he will not be entitled to receive severance benefits. Dr. Feingold's letter agreement also contains IP assignment and non-solicitation obligations.

Retirement Plan

We maintain the Pyxis Oncology 401(k) Plan, a qualified 401(k) savings plan, which allows participants to defer from 0% to 100% of cash compensation up to the maximum amount allowed under Internal Revenue Service guidelines. We do not provide any matching or company contributions to the plan. Participants are always vested in their contributions to the plan.

Equity Compensation Plans and Other Benefit Plans

2021 Equity and Incentive Plan

In connection with this offering, our Board of Directors expects to adopt, and our current stockholders expect to approve, the 2021 Equity and Incentive Plan, or the 2021 Plan, prior to the effective date of this offering. The 2021 Plan will replace the Pyxis Oncology, Inc. 2019 Stock Plan, as described below.

The purposes of the 2021 Plan are to align the interests of our stockholders and those eligible for awards, to retain officers, directors, employees, and other service providers, and to encourage them to act in our long-term best interests. Our 2021 Plan provides for the grant of incentive stock options (within the meaning of Internal Revenue Code Section 422), nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, other stock awards, and performance awards. The material terms of the 2021 Plan are expected to be as follows:

Eligibility. Officers, directors, employees, consultants, agents and independent contractors who provide services to us or to any subsidiary of ours are eligible to receive awards under the 2021 Plan.

Stock Subject to the 2021 Plan. The number of shares reserved for issuance under the 2021 Plan is , plus an annual increase added on the first day of each fiscal year, beginning with the fiscal year ending

December 31, 2022 and continuing until, and including, the fiscal year ending December 31, 2031. The annual increase will be equal to the lesser of (i) % of the number of shares of common stock outstanding on the first day of such fiscal year or (ii) such other amount determined by our Board of Directors. To the extent an equity award granted under the 2021 Plan (other than any substitute award), expires or otherwise terminates without having been exercised or paid in full, or is settled in cash, the shares subject to such award will become available for future grant under the 2021 Plan. In addition, to the extent shares subject to an award granted under the 2021 Plan are withheld to satisfy a participant's tax withholding obligation upon the exercise or settlement of such award (other than any substitute award) or to pay the exercise price of a stock option, such shares will become available for future grant under the 2021 Plan.

Plan Administration. Our compensation committee will administer the 2021 Plan. Our Board of Directors has the authority to amend and modify the plan, subject to any stockholder approval required by applicable law or stock exchange rules. Subject to the terms of the 2021 Plan, our compensation committee will have the authority to determine the eligibility for awards and the terms, conditions, and restrictions, including vesting terms, the number of shares subject to an award, and any performance goals applicable to grants made under the 2021 Plan. The compensation committee also will have the authority, subject to the terms of the 2021 Plan, to construe and interpret the 2021 Plan and awards, and amend outstanding awards at any time.

Stock Options and Stock Appreciation Rights. Our compensation committee may grant incentive stock options, nonstatutory stock options, and stock appreciation rights under the 2021 Plan, provided that incentive stock options are granted only to employees. Other than with respect to substitute awards, the exercise price of stock options and stock appreciation rights under the 2021 Plan will be fixed by the compensation committee, but must equal at least 100% of the fair market value of our common stock on the date of grant. The term of an option or stock appreciation right may not exceed ten years; provided, however, that an incentive stock option held by an employee who owns more than 10% of all of our classes of stock, or of certain of our affiliates, may not have a term in excess of five years, and must have an exercise price of at least 110% of the fair market value of our common stock on the grant date. Subject to the provisions of the 2021 Plan, the compensation committee will determine the remaining terms of the options and stock appreciation rights (e.g., vesting). Upon a participant's termination of service, the participant may exercise his or her option or stock appreciation right, to the extent vested (unless the compensation committee permits otherwise), as specified in the award agreement.

Stock Awards. Our compensation committee will decide at the time of grant whether an award will be in the form of restricted stock, restricted stock units, or other stock award. The compensation committee will determine the number of shares subject to the award, vesting, and the nature of any performance measures. Unless otherwise specified in the award agreement, the recipient of restricted stock will have voting rights and be entitled to receive dividends with respect to his or her shares of restricted stock. The recipient of restricted stock units will not have voting rights, but his or her award agreement may provide for the receipt of dividend equivalents. Our compensation committee may grant other stock awards that are based on or related to shares of our common stock, such as awards of shares of common stock granted as bonus and not subject to any vesting conditions, deferred stock units, stock purchase rights, and shares of our common stock issued in lieu of our obligations to pay cash under any compensatory plan or arrangement.

Performance Awards. Our compensation committee will determine the value of any performance award, the vesting and nature of the performance measures, and whether the award is denominated or settled in cash or in shares of our common stock. The performance goals applicable to a particular award will be determined by our compensation committee at the time of grant.

Transferability of Awards. The 2021 Plan does not allow awards to be transferred other than by will or the laws of inheritance following the participant's death, and options may be exercised, during the lifetime of the participant, only by the participant. However, an award agreement may permit a participant to assign an award to a family member by gift or pursuant to a domestic relations order, or to a trust, family limited partnership or similar entity established for one of the participant's family members. A participant may also designate a beneficiary who will receive outstanding awards upon the participant's death.

Certain Adjustments. If any change is made in our common stock subject to the 2021 Plan, or subject to any award agreement under the 2021 Plan, without the receipt of consideration by us, such as through a stock split, stock dividend, extraordinary distribution, recapitalization, combination of shares, exchange of shares or other similar transaction, appropriate adjustments will be made in the number, class, and price of shares subject to each outstanding award and the numerical share limits contained in the plan.

Change in Control. Subject to the terms of the applicable award agreement, upon a "change in control" (as defined in the 2021 Plan), our Board of Directors may, in its discretion, determine whether some or all outstanding options and stock appreciation rights will become exercisable in full or in part, whether the restriction period and performance period applicable to some or all outstanding restricted stock awards and restricted stock unit awards will lapse in full or in part and whether the performance measures applicable to some or all outstanding awards will be deemed to be satisfied. Our Board of Directors may further require that shares of stock of the corporation resulting from such a change in control, or a parent corporation thereof, or other property be substituted for some or all of our shares of common stock subject to an outstanding award and that any outstanding awards, in whole or in part, be surrendered to us by the holder and be immediately cancelled by us in exchange for a cash payment, shares of common stock of the corporation resulting from or succeeding us, other property or a combination of cash, such shares of stock or other property.

Clawback. Awards granted under the 2021 Plan and any cash payment or shares of our common stock delivered pursuant to an award are subject to forfeiture, recovery, or other action pursuant to the applicable award agreement or any clawback or recoupment policy that we may adopt.

Plan Termination and Amendment. Our Board of Directors has the authority to amend, suspend, or terminate the 2021 Plan, subject to any requirement of stockholder approval required by law or stock exchange rules. Our 2021 Plan will terminate on the ten-year anniversary of its approval by our Board of Directors, unless we terminate it earlier.

New Plan Benefits. The compensation committee has the discretion to grant awards under the 2021 Plan, and therefore it is not possible at the time of filing of this prospectus to determine future awards that will be received by our named executive officers or others under the 2021 Plan. All officers, directors, employees, consultants, agents and independent contractors of the Company and its subsidiaries are eligible for consideration to participate in the 2021 Plan.

2019 Stock Plan

The following is a description of the material terms of the Pyxis Oncology, Inc. 2019 Stock Plan, or the 2019 Stock Plan. The summary below does not contain a complete description of all provisions of the 2019 Stock Plan and is qualified in its entirety by reference to the plan, a copy of which will be included as an exhibit to the registration statement of which this prospectus forms a part. See "Where You Can Find Additional Information."

As discussed above, we expect to replace the 2019 Stock Plan with a new plan adopted prior to the completion of this offering. Once that new plan becomes effective, we will no longer make awards under the 2019 Stock Plan. However, the 2019 Stock Plan will continue to govern outstanding awards granted prior to its termination.

Authorized Shares. Under the 2019 Stock Plan, 4,777,358 shares of our common stock are reserved for issuance, subject to adjustment for stock splits and other similar changes in capitalization. As of , 2021, our employees, directors and consultants held outstanding stock options and restricted stock granted under the 2019 Stock Plan with respect to up to shares of our common stock, with of those options vested as of such date. No other equity awards are outstanding under the 2019 Stock Plan as of such date.

Administration. Our Board of Directors, or a committee appointed by our board, administers the 2019 Stock Plan. Under the terms of the plan, the number of shares subject to outstanding awards and the exercise or base

prices of those awards are subject to adjustment in the event of certain changes in our capital structure, reorganizations and other extraordinary events.

Participants. Employees, directors and consultants of the company and our subsidiaries are eligible to participate in the 2019 Stock Plan, if selected for participation by the plan administrator.

Types and Terms of Awards. Under the 2019 Stock Plan, we are authorized to grant stock awards, stock options, and restricted stock units. Stock options may not be exercised beyond a ten-year term (or such shorter period as required with respect to incentive stock options held by certain holders). The terms of the awards will be specified in an underlying award agreement approved by the plan administrator.

Corporate Transaction. In the event we experience a corporate transaction, such as a merger, consolidation or sale of substantially all of our assets, awards under the 2019 Stock Plan will be subject to the terms of the definitive agreement relating to such transaction. Such treatment may include the cash settlement, assumption, substitution or termination of outstanding awards. This offering will not constitute a change in control under the plan.

Amendment and Termination. The Board of Directors may, at any time, amend, suspend or terminate the 2019 Stock Plan as it shall deem advisable, subject to any stockholder approval required by applicable law, rule or regulation. No amendment may impair the rights of a holder of an outstanding award without the consent of such holder.

2021 Employee Stock Purchase Plan

In connection with this offering, our Board of Directors will adopt and our current stockholders expect to approve the 2021 Employee Stock Purchase Plan, or the ESPP, to be effective upon the completion of this offering.

Eligibility. Generally, all of our employees (including those of our consolidated subsidiaries, other than those subsidiaries excluded from participation by our Board of Directors or compensation committee) are eligible to participate in the ESPP.

Stock Subject to the ESPP. shares of our common stock, subject to adjustment for stock splits, stock dividends or other changes in our common stock, have been reserved for issuance under the ESPP. Subject to the adjustment provisions contained in the ESPP, the maximum number of shares of our common stock available under the ESPP will automatically increase on the first trading day in January of each calendar year, commencing January 1, 2022, by an amount equal to the lesser of % of the shares of our common stock issued and outstanding on December 31 of the immediately preceding calendar year, shares of our common stock or such lesser amount as is determined by our Board of Directors.

Plan Administration. The ESPP will be administered by the compensation committee or a designee of the compensation committee.

Offering Periods. The ESPP permits employees to purchase our common stock through payroll deductions during -month offering periods.

Payroll Deductions and Other Limits. Participants may authorize payroll deductions of a specific percentage of compensation of up to 15%, with such deductions being accumulated for six-month purchase periods beginning on the first business day of each offering period and ending on the last business day of each offering period. No employee may participate in an offering period if the employee owns 5% or more of the total combined voting power or value of our stock or the stock of any of our subsidiaries. No participant may purchase more than shares of our common stock during any offering period.

Purchase Price. Under the terms of the ESPP, the purchase price per share with respect to an offering period will equal the lesser of (i) 85% of the fair market value of a share of our common stock on the first business day of such offering period and (ii) 85% of the fair market value of a share of our common stock on the last business day of such offering period, although the compensation committee has discretion to change the purchase price with respect to future offering periods, subject to the terms of the ESPP.

Termination and Amendment. The ESPP may be amended by our Board of Directors or the compensation committee but may not be amended without prior stockholder approval to the extent required by Section 423 of the Code. The ESPP shall continue in effect until the earlier of (i) the termination of the ESPP by our Board of Directors or the compensation committee pursuant to the terms of the ESPP and (ii) the ten-year anniversary of the effective date of the ESPP, with no new offering periods commencing on or after such ten-year anniversary.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the compensation arrangements discussed in the section titled "Executive Compensation," we describe below the transactions since January 1, 2018 to which we have been a participant, in which the amount involved in the transaction exceeds or will exceed $120,000 and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or any immediate family member of, or person sharing the household with, any of these individuals, had or will have a direct or indirect material interest.

Series A Convertible Preferred Stock Financing

In June 2019, we issued a total of 22,724,925 shares of our Series A Convertible Preferred Stock for $0.9681 per share. The shares were issued to new and existing stockholders generating $21.9 million in proceeds, net of issuance costs. Every shares of Series A Convertible Preferred Stock will be automatically converted into one share of common stock upon the completion of this offering.

The participants in the Series A Convertible Preferred Stock financing included certain beneficial owners of more than 5% of our capital stock and entities affiliated with certain of our directors, as set forth in the table below:

Related Party	Shares of Series A Convertible Preferred Stock (#)
Bayer World Investements B.V.(1)	11,362,462
Longwood Fund IV, L.P.(2)	5,164,756

(1) Bayer World Investments B.V. is a holder of 5% or more of our capital stock. Lucio Iannone, Ph.D. is an investor at Leaps by Bayer, an entity affiliated Bayer World Investments B.V., and a member of our board of directors.
(2) Longwood Fund IV, L.P. is a holder of 5% or more of our capital stock. David Steinberg is a General Partner at Longwood Fund, an entity affiliated with Longwood Fund IV, L.P., and the chair of our board of directors, as well as one of our co-founders.

Series B Convertible Preferred Stock Financing

In March 2021, we issued a total of 104,812,248 shares of our Series B Convertible Preferred Stock for $1.6458 per share. 92,356,299 of the shares were issued to new and existing stockholders generating $151.6 million in proceeds, net of issuance costs, 12,152,145 shares were issued to Pfizer as part of the $20.0 million license expenses under the Pfizer License Agreement (see "—Pfizer, Inc. License Agreement" below) and 303,804 shares were issued to LegoChem as part of the $0.5 million research and development expenses under the Opt-In Agreement. Every shares of Series B Convertible Preferred Stock will be automatically converted into one share of common stock upon the completion of this offering.

The participants in the Series B Convertible Preferred Stock financing included certain beneficial owners of more than 5% of our capital stock and entities affiliated with certain of our directors, as set forth in the table below:

Related Party	Shares of Series B Convertible Preferred Stock (#)
Entities affiliated with Pfizer Inc.(1)	18,228,217
Perceptive Life Sciences Master Fund, Ltd.	9,721,716
Arix Bioscience Holdings Limited(2)	9,114,109
Entities affiliated with RTW Investments(3)	9,114,109
Entities affiliated with RA Capital	8,202,698
Bayer World Investments B.V.(4)	6,076,072
Longwood Fund IV, L.P.(5)	2,551,950

(1) Pfizer Inc. and Pfizer Ventures (US) LLC are collectively holders of 5% or more of our capital stock. Christopher O'Donnell, Ph.D., is a Partner at Pfizer Ventures and a member of our board of directors.

(2) Arix Bioscience Holdings Limited is a holder of 5% or more of our capital stock. Mark Chin is a Managing Director at Arix Bioscience, an entity affiliated Arix Bioscience Holdings Limited, and a member of our board of directors.
(3) RTW Innovation Master Fund, Ltd., RTW Master Fund, Ltd. and RTW Venture Fund Limited. (the "RTW Entities") are collectively holders of 5% or more of our capital stock. Gotham Makker is the head of Strategic Investments for RTW Investments, LP, which is the manager of RTW Master Fund, Ltd., RTW Venture Fund Limited and RTW Innovation Master Fund, and a member of our board of directors.
(4) Bayer World Investments B.V. is a holder of 5% or more of our capital stock. Lucio Iannone, Ph.D. is an investor at Leaps by Bayer, an entity affiliated Bayer World Investments B.V., and a member of our board of directors.
(5) Longwood Fund IV, L.P. is a holder of 5% or more of our capital stock. David Steinberg is a General Partner at Longwood Fund, an entity affiliated with Longwood Fund IV, L.P., and the chair of our board of directors, as well as one of our co-founders.

Amended and Restated Investor Rights Agreement

In March 2021, in connection with the closing of our Series B convertible preferred stock financing, we entered into an Amended and Restated Investor Rights Agreement, an Amended and Restated Voting Agreement, and an Amended and Restated Right of First Refusal and Co-Sale Agreement with certain holders of our capital stock, including with certain beneficial owners of more than 5% of our capital stock and entities affiliated with certain of directors. Our Amended and Restated Right of First Refusal and Co-Sale Agreement provides for rights of first refusal and co-sale in respect of sales by certain holders of our capital stock. Our Amended and Restated Voting Agreement also provides certain drag-along rights and contains provisions with respect to the elections of our board of directors and its composition. Upon the consummation of this offering, the Amended and Restated Right of First Refusal and Co-Sale Agreement and the Amended and Restated Voting Agreement each will terminate. Additionally, the Amended and Restated Investor Rights Agreement provides for certain registration rights which will survive the completion of this offering, as more fully described in "Description of Capital Stock—Registration Rights."

Pfizer, Inc. License Agreement

In December 2020, we entered into a license agreement with Pfizer, which was amended and became effective for the Company in March 2021. Pursuant to this agreement, we incurred a combined $25.0 million, consisting of an upfront fee equal to a cash payment of $5.0 million and the issuance of 12,152,145 shares of Series B Convertible Preferred Stock, with a value of $20.0 million in 2021 to Pfizer and are obligated to pay future contingent payments and royalties. See "Business—Licensing and Collaboration Agreements—License Agreement with Pfizer, Inc." for a further discussion of this agreement.

Employment Agreements

See the "Executive Compensation—Employment Agreements, Severance and Change in Control Agreements" section of this prospectus for a further discussion of these arrangements.

Indemnification of Directors and Executive Officers

We have entered into indemnification agreements with each of our directors and executive officers. The indemnification agreements and our bylaws will require us to indemnify our directors to the fullest extent not prohibited by DGCL. Subject to very limited exceptions, our bylaws will also require us to advance expenses incurred by our directors and officers. For more information regarding these agreements, see the section titled "Management—Limitations on Director and Officer Liability and Indemnification."

Policies and Procedures for Related Party Transactions

Our audit committee has the primary responsibility for the review, approval and oversight of any "related party transaction," which is any transaction, arrangement or relationship (or series of similar transactions,

arrangements or relationships) in which we are, were or will be a participant and the amount involved exceeds $120,000, and in which the related person has, had or will have a direct or indirect material interest. We intend to adopt a written related party transaction policy to be effective upon the completion of this offering. Under our related party transaction policy, our management will be required to submit any related person transaction not previously approved or ratified by our audit committee to our audit committee. In approving or rejecting the proposed transactions, our audit committee will take into account all of the relevant facts and circumstances available.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of September 15, 2021 and as adjusted to reflect the sale of our common stock offered by us in this offering for:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of September 15, 2021, through the exercise of any option, warrant or other right. In computing the percentage beneficial ownership of a person, common stock not outstanding and subject to options, warrants or other rights held by that person that are currently exercisable or exercisable within 60 days of September 15, 2021 are deemed outstanding for purposes of calculating the percentage ownership of that person, but are not deemed outstanding for computing the percentage ownership of any other person. Subject to the foregoing, percentage of beneficial ownership is based on 13,903,572 shares of common stock outstanding as of September 15, 2021, and assumes the conversion of all outstanding shares of Series A and Series B Convertible Preferred Stock as of that date into 127,537,173 shares of common stock. Percentage of beneficial ownership after this offering (assuming no exercise of the underwriters' option to purchase additional shares) also assumes the issuance and sale by us of shares of common stock in this offering.

Percentage of voting common stock beneficially owned after this offering assumes the issuance and sale by us of shares of common stock in this offering (assuming no exercise of the underwriters' option to purchase additional shares).

To our knowledge, except as set forth in the footnotes to this table and subject to applicable community property laws, each person named in the table has sole voting and investment power with respect to the shares set forth opposite such person's name. Except as otherwise indicated, the address of each of the persons in this table is c/o Pyxis Oncology, Inc., 35 CambridgePark Drive Cambridge, Massachusetts 02140.

Name of Beneficial Owner	Shares of Voting Common Stock Beneficially Owned Before and After this Offering	Percentage of Voting Common Stock Beneficially Owned Before this Offering	Percentage of Voting Common Stok Beneficially Owned After this Offering
5% Stockholders:			
Entities affiliated with Pfizer Inc.(1)	18,228,217	12.9%	
Bayer World Investments B.V. (2)	17,438,534	12.3%	
Perceptive Life Sciences Master Fund, Ltd.(3)	9,721,716	6.9%	
Arix Bioscience Holdings Limited(4)	9,114,109	6.4%	
Entities affiliated with RTW Investments(5)	9,114,109	6.4%	
Entities affiliated with RA Capital(6)	8,202,698	5.8%	
Longwood Fund IV, L.P.(7)	7,716,706	5.5%	
Directors and Named Executive Officers:			
Lara Sullivan, M.D.(8)	3,928,372	2.7%	
Pamela Connealy	—	—	
Jay Feingold, M.D., Ph.D.	—	—	
Ronald Herbst, Ph.D.(9)	1,334,938	*	
Ritu Shah	—	—	
Robert Crane(10)	725,414	*	

Name of Beneficial Owner	Shares of Voting Common Stock Beneficially Owned Before and After this Offering	Percentage of Voting Common Stock Beneficially Owned Before this Offering	Percentage of Voting Common Stok Beneficially Owned After this Offering
David Steinberg(11)	2,421,289	1.7%	
John Flavin(12)	839,069	*	
Lucio Iannone, Ph.D.	—	—	
Gotham Makker, M.D.	—	—	
Christopher O'Donnell Ph.D.	—	—	
Mark Chin(4)	9,114,109	6.4%	
Freda Lewis-Hall, M.D.	—	—	
Thomas Civik	—	—	
Darren Cline	—	—	
All executive officers, named executive officers and directors as a group (15 persons)(13)	18,363,191	12.6%	

* Indicates beneficial ownership of less than 1% of the outstanding shares of our common stock.

(1) Consists of 12,152,145 shares of common stock issuable upon the conversion of the Series B preferred stock held by Pfizer Inc. and 6,076,072 shares of common stock issuable upon the conversion of the Series B preferred stock held by Pfizer Ventures (US) LLC. The address of Pfizer Ventures (US) LLC is c/o Pfizer Inc., 235 E 42nd Street, New York, New York 10017. Pfizer Inc. is the parent company of Pfizer Ventures (US) LLC and may be deemed to beneficially own the shares directly owned by Pfizer Ventures (US) LLC. As of September 16, 2021, the board of directors of Pfizer Inc. is comprised of the following individuals: Albert Bourla, Ronald E. Blaylock, Susan Desmond-Hellmann, Joseph J. Echevarria, Scott Gottlieb, Helen H. Hobbs, Susan Hockfield, Dan R. Littman, Shantanu Narayen, Suzanne Nora Johnson, James Quincey and James C. Smith. Pfizer Inc. is a publicly traded company. The address for Pfizer Inc. is 235 East 42nd St., New York, New York 10017.

(2) Consists of 11,362,462 shares of common stock issuable upon the conversion of the Series A preferred stock and 6,076,072 shares of common stock issuable upon the conversion of the Series B preferred stock held by Bayer World Investments B.V. The securities are held directly by Bayer World Investments B.V., a Dutch private limited company, which is an indirect, wholly owned subsidiary of Bayer Aktiengesellschaft, a German stock corporation. Accordingly, Bayer Aktiengesellschaft may be deemed to be an indirect beneficial owner of the shares beneficially owned directly by Bayer World Investments B.V. Voting and investment decisions with respect to these shares are made by Bayer AG's Board of Management, which consists of Werner Baumann, Liam Condom, Serena Lin, Wolfgang Nickl, Stefan Oelrich, and Heiko Schipper. Each of Messrs. Baumann, Condon, Nickl, Oelrich, Schipper, and Ms. Lin disclaim beneficial ownership over the shares held by Bayer World Investments B.V. The address for Bayer World Investments B.V. is Energieweg 1, 3641 RT Mijdrecht, Netherlands.

(3) Consists of 9,721,716 shares of common stock issuable upon the conversion of the Series B preferred stock held by Perceptive Life Sciences Master Fund Ltd (Perceptive Master Fund). Perceptive Advisors LLC (Perceptive Advisors, and together with Perceptive Master Fund, the Perceptive Entities) serves as the investment manager to Perceptive Master Fund and may be deemed to beneficially own the securities directly held by Perceptive Master Fund. Joseph Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own the securities directly held by Perceptive Master Fund. The address for Mr. Edelman and the Perceptive Entities is 51 Astor Place, 10th Floor, New York, NY 10003.

(4) Consists of 9,114,109 shares of common stock issuable upon the conversion of the Series B preferred stock held by Arix Bioscience Holdings Limited, or Arix. Mr. Chin, a member of our board of directors, Mr. Peregrine Moncreiffe, Mr. Isaac Kohlberg and Ms. Maureen O'Connell comprise the Investment Committee of Arix and share voting and dispositive power over the shares held by Arix. The address for Arix is Duke Street House, 50 Duke Street, London, W1K 6JL, United Kingdom.

(5) Consists of 9,114,109 shares of common stock issuable upon the conversion of the Series B preferred stock held in the aggregate by RTW Innovation Master Fund, Ltd., RTW Master Fund, Ltd. and RTW Venture Fund Limited. RTW Investments, LP is the manager of RTW Master Fund, Ltd., RTW Venture Fund Limited and RTW Innovation Master Fund. Roderick Wong, M.D. is the Managing Partner and Chief Investment Officer of RTW Investments, LP and as such has sole voting and investment control over such shares. Dr. Wong disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The address of RTW Investments, LP and Dr. Wong is 40 10th Avenue, Floor 7, New York, New York, 10014.

(6) Consists of 6,972,293 shares of common stock issuable upon conversion of Series B preferred stock held by RA Capital Healthcare Fund, L.P. (RA Healthcare) and 1,230,405 shares of common stock issuable upon conversion of Series B preferred stock held by RA Capital Nexus Fund II, L.P. (Nexus II). RA Capital Management, L.P., is the investment manager for RA Healthcare and Nexus II. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky and Rajeev Shah are the managing members. RA Capital Management, L.P. RA Capital Management GP, LLC, Peter Kolchinsky and Rajeev Shah may be deemed to have shared voting and investment power with respect to the shares held RA Healthcare and Nexus II. The address of all entities and individuals referenced in this footnote is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.

(7) These shares are held by Longwood Fund IV, L.P. (“Longwood”). The general partner of Longwood is Longwood Fund IV GP, LLC (“Longwood GP”). Voting, investment and dispositive decisions at Longwood GP with respect to the securities held by Longwood are made by an investment committee comprised of Christoph Westphal, Richard Aldrich and John Lawrence (collectively, the “IC Members”). Longwood GP and each of the IC Members may be deemed to share voting, investment and dispositive power over the securities held by Longwood and as a result may be deemed to have beneficial ownership over such securities. Longwood GP and each of the IC Members disclaims beneficial ownership over the securities held by Longwood, except to the extent of their respective pecuniary interests therein.

(8) Consists of 831,250 shares of common stock held directly by Dr. Sullivan and 3,097,122 shares of common stock issuable upon the exercise of stock options and restricted stock exercisable or vesting within 60 days of September 15, 2021.

(9) Consists of 287,500 shares of common stock held directly by Dr. Herbst and 1,047,438 shares of common stock issuable upon the exercise of stock options and restricted stock exercisable or vesting within 60 days of September 15, 2021.

(10) Consists of 167,747 shares of common stock held directly by Mr. Crane and 557,667 shares of common stock issuable upon the exercise of stock options and restricted stock exercisable or vesting within 60 days of September 15, 2021.

(11) Consists of 2,273,046 shares of common stock held directly by David Steinberg.

(12) Consists of 788,627 shares of common stock held directly by John Flavin.

(13) Consists of 13,462,279 shares of common stock held and 4,900,912 shares of common stock issuable upon the exercise of stock options and restricted stock exercisable or vesting within 60 days of September 15, 2021.

DESCRIPTION OF CAPITAL STOCK

This section contains a description of our capital stock and the material provisions of our amended and restated certificate of incorporation and bylaws that will be in effect upon the completion of this offering and is qualified by reference to the forms of our amended and restated certificate of incorporation and our bylaws filed as exhibits to the registration statement relating to this prospectus, and by the applicable provisions of Delaware law. The descriptions of our common stock and preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

General

Upon the completion of this offering, our amended and restated certificate of incorporation will authorize shares of common stock, $0.001 par value per share, and shares of undesignated preferred stock, $0.001 par value per share, the rights, preferences and privileges of which may be designated from time to time by our board of directors.

Common Stock

As of June 30, 2021, after giving effect to the automatic conversion of all outstanding shares of our Series A convertible preferred stock and Series B convertible preferred stock into an aggregate of shares of our common stock, which will occur immediately prior to the completion of this offering and the issuance of shares of our common stock, based upon an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, upon the net exercise of warrants that would otherwise expire upon completion of this offering, there were outstanding of our common stock, held by approximately stockholders of record, and shares of our common stock issuable upon exercise of outstanding stock options.

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares 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 only then at the times and in the amounts that our board of directors may determine. See the section titled “Dividend Policy” for more information.

Voting Rights

The holders of our common stock are entitled to one vote per share. Stockholders do not have the ability to cumulate votes for the election of directors. Our amended and restated certificate of incorporation and bylaws that will be in effect upon completion of this offering will provide for a classified board of directors consisting of three classes of approximately equal size, each serving 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 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 of preferred stock.

Preferred Stock

Pursuant to the provisions of our certificate of incorporation in effect prior to this offering, currently outstanding shares of our Series A and Series B convertible preferred stock will automatically be converted into shares of our common stock upon the completion of this offering. Following the completion of this offering, no shares of our preferred stock will be outstanding.

Pursuant to our amended and 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 its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Our board of directors can also 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, 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 our control 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, 2021, we had outstanding options to purchase an aggregate of shares of our common stock, with a weighted-average exercise price of $ per share, pursuant to our equity incentive plans.

Registration Rights

Upon the completion of this offering and subject to the lock-up agreements entered into in connection with this offering and federal securities laws, certain holders of shares of our common stock that will be issued upon the conversion of our Series A and Series B convertible preferred stock in connection with this offering, will initially be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of our Amended and Restated Investor Rights Agreement and are described in additional detail below. The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will terminate upon the earliest of (i) with respect to each stockholder, such date, on or after the completion of this offering, on which all registrable shares held by such stockholder may immediately be sold during any three month period pursuant to Rule 144, (ii) the occurrence of a deemed liquidation event, as defined in our certificate of incorporation, as currently in effect and (iii) the third anniversary of the completion of this offering.

Demand Registration Rights

Upon the completion of this offering, holders of approximately shares of our common stock issuable upon conversion of outstanding Series A and Series B convertible preferred stock will be entitled to certain demand registration rights. Beginning 180 days following the effectiveness of the registration statement of which this prospectus is a part, investors holding, collectively, at least a majority of the registrable securities then outstanding and held by such holders having an anticipated aggregate offering price of at least $15.0 million may, on not more than two occasions, request that we register all or a portion of their shares, subject to certain specified exceptions. If any of these holders exercises its demand registration rights, then holders of approximately shares of our common stock issuable upon the conversion of our Series A and Series B convertible preferred stock in connection with this offering will be entitled to register their shares, subject to specified conditions and limitations in the corresponding offering.

Piggyback Registration Rights

In connection with this offering, holders of approximately shares of our common stock issuable upon conversion of outstanding Series A and Series B convertible preferred stock are entitled to their rights to notice of this offering and to include their shares of registrable securities in this offering. These stockholders' rights to notice of this offering and to include their shares of registrable securities in this offering have been waived in connection with this offering. In the event that we propose to register any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of registrable securities will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to specified conditions and limitations.

Shelf Registration Rights

Upon the completion of this offering, the holders of approximately shares of our common stock issuable upon conversion of outstanding Series A and Series B convertible preferred stock will initially be entitled to certain Form S-3 registration rights. Certain major investors holding collectively at least 30% of registrable securities may, on not more than two registrations on Form S-3 within any 12-month period, request that we register all or a portion of their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to specified exceptions. Such request for registration on Form S-3 must cover securities with an aggregate offering price which equals or exceeds $5.0 million, net of selling expenses. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Anti-Takeover Provisions

The provisions of the Delaware General Corporation Law, or the DGCL, our amended and restated certificate of incorporation and our bylaws to be in effect following 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, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and encourage persons seeking to acquire control of our company to first negotiate 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.

Section 203 of the DGCL

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 three-year period following the date that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business

combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction, which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction, which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock, which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance of transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Amended and Restated Certificate of Incorporation and Bylaw Provisions

Our amended and restated certificate of incorporation and our bylaws will include a number of provisions that may have the effect of deterring hostile takeovers, or delaying or preventing changes in control of our management team or changes in our board of directors or our governance or policy, including the following:

Board Vacancies

Our amended and restated certificate of incorporation and bylaws will authorize generally only our board of directors to fill vacant directorships resulting from any cause or created by the expansion of our board of directors. In addition, the number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.

Classified Board

Our amended and restated certificate of incorporation and bylaws will provide that our board of directors is classified into three classes of directors. The existence of a classified board of directors could delay a successful

tender offeror from obtaining majority control of our board of directors, and the prospect of that delay might deter a potential offeror. See the section titled "Management—Corporate Governance—Classified Board of Directors" for additional information.

Directors Removed Only for Cause

Our amended and restated certificate of incorporation will provide that stockholders may remove directors only for cause.

Supermajority Requirements for Amendments of Our Amended and Restated Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation will further provide that the affirmative vote of holders of at least two-thirds of the voting power of our outstanding common stock will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to the classified board, the size of the board of directors, removal of directors, special meetings, actions by written consent and designation of our preferred stock. The affirmative vote of holders of at least two-thirds of the voting power of our outstanding common stock will be required to amend or repeal our bylaws, although our bylaws may be amended by a simple majority vote of our board of directors.

Stockholder Action; Special Meetings of Stockholders

Our amended and 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, holders of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our bylaws. Our amended and restated certificate of incorporation and our 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, our president or the lead independent director, 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 to take any action, including the removal of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our 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. To be timely, a stockholder's notice generally must be delivered to us not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting of stockholders. Our bylaws also will specify certain requirements regarding the form and content of a stockholder's notice. With respect to nominations of persons for election to our board of directors, the notice shall provide information about the nominee, including, among other things, name, age, address, principal occupation, ownership of our capital stock and whether they meet applicable independence requirements. With respect to the proposal of other business to be considered by our stockholders at an annual meeting, the notice shall provide a brief description of the business desired to be brought before the meeting, the text of the proposal or business, the reasons for conducting such business at the meeting and any material interest in such business by such stockholder and any beneficial owners and associated persons on whose behalf the notice is made, or the proposing persons. In addition, a stockholder's notice must set forth certain information related to the proposing persons, including, among other things:

- the name and address of the proposing persons;
- information as to the ownership by the proposing persons of our capital stock and any derivative interest or short interest in any of our securities held by the proposing persons;

- information as to any material relationships and interest between the proposing persons and us, any of our affiliates and any of our principal competitors;
- a representation that the stockholder is a holder of record of our stock entitled to vote at that meeting and that the stockholder intends to appear in person or by proxy at the meeting to propose such nomination or business; and
- a representation whether the proposing persons intend or are part of a group which intends to deliver a proxy statement or form of proxy to holders of at least the percentage of our outstanding capital stock required to elect the nominee or carry the proposal.

These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders. 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 certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation and bylaws will not provide for cumulative voting.

Issuance of Undesignated Preferred Stock

We anticipate that after the filing of our amended and restated certificate of incorporation, our board will have the authority, without further action by the stockholders, to issue up to 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 enables our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Exclusive Forum

Our amended and restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf under Delaware law, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or bylaws, (4) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) or (5) any other action asserting an "internal corporate claim," as defined in Section 115 of the Delaware General Corporation Law, in all cases subject to the court having jurisdiction over indispensable parties named as defendants. These exclusive-forum provisions do not apply to claims under the Securities Act or the Exchange Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to this provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our common stock will be Broadridge Corporate Issuer Solutions, Inc.

Exchange Listing

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

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 our common stock or the availability of our common stock for sale will have on the market price of our common stock prevailing from time to time. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of our common stock will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Following the completion of this offering, based on the number shares of our common stock outstanding as of , and assuming no exercise of outstanding options after such date, we will have a total of shares of common stock outstanding.

Of those outstanding shares, shares of common stock sold in the offering will be freely tradeable, except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act, would only be able to be sold in compliance with the Rule 144 limitations described below.

The remaining outstanding common stock will be, and shares subject to outstanding options will be upon issuance, deemed "restricted securities" as defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if they are registered or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. All of our executive officers, directors and holders of substantially all of our equity securities are subject to lock-up agreements under which they have agreed, subject to specific exceptions, not to sell any of our equity securities for 180 days following the date of this prospectus. As a result of these agreements and subject to the provisions of Rule 144 or Rule 701, common stock will be available for sale in the public market as follows:

- beginning on the date of this prospectus, all shares of our common stock sold in this offering will be immediately available for sale in the public market; and
- beginning 181 days after the date of this prospectus (subject to the terms of the lock-up and market standoff agreements described below), additional shares will become eligible for sale in the public market, of which shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below.

Lock-Up Agreements

We, our directors and officers and holders of substantially all of our equity securities have agreed or will agree prior to the effective date of the registration statement of which this prospectus is a part, subject to certain exceptions, not to offer, pledge sell, contract to sell, transfer, lend or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for common stock, for 180 days after the date of this prospectus without first obtaining the written consent of , on behalf of the underwriters. These agreements are described below under the section titled "Underwriting."

Rule 144

In general, Rule 144 provides that once we have been subject to the 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 common stock proposed to be sold for at least six months 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

common stock 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 our common stock on behalf of our affiliates are entitled to sell upon expiration of the market standoff agreements and lock-up agreements described above, within any three-month period, a number of our common stock that does not exceed the greater of:

- 1% of the number of our common stock then outstanding, which will equal shares immediately after the completion of this offering; or
- the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales of our common stock made in reliance upon Rule 144 by our affiliates or persons selling 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 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 affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701.

Registration Rights

Upon the completion of this offering, the holders of shares of common stock will have rights, subject to certain 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 other stockholders. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. These stockholders' rights to notice of this offering and to include their shares of registrable securities in this offering have been waived in connection with this offering. See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Registration Statement

We intend to file a registration statement on Form S-8 under the Securities Act promptly after the effectiveness of this offering to register shares of our common stock subject to options outstanding, as well as reserved for future issuance, under our equity compensation plans. The registration statement on Form S-8 is expected to become effective immediately upon filing, and shares of our common stock covered by the registration statement will then become eligible for sale in the public market, subject to the Rule 144 limitations applicable to affiliates, vesting restrictions and any applicable market standoff agreements and lock-up agreements. See the section titled "Executive Compensation—Equity Compensation Plans and Other Benefit Plans" for a description of our equity compensation plans.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a summary of material U.S. federal income tax consequences of the ownership and disposition of shares of our common stock as of the date hereof. Except where noted, this summary deals only with common stock that is held as a capital asset by a non-U.S. holder (as defined below). This summary is based upon provisions of the Code and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those summarized below. We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

A "non-U.S. holder" means a beneficial owner of shares of our common stock (other than an entity treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or any other entity treated 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;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- 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 (as defined under 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.

This summary does not address all aspects of U.S. federal income taxation that may be relevant to non-U.S. holders in light of their particular circumstances. In addition, this summary does not address the Medicare tax on certain net investment income, U.S. federal gift or estate tax laws, any state, local or non-U.S. tax laws or any tax treaties. This summary also does not address the U.S. federal income tax consequences applicable to non-U.S. holders that are subject to special treatment under the U.S. federal income tax laws, including (without limitation) former citizens or long-term residents of the United States, foreign pension funds, "controlled foreign corporations," "passive foreign investment companies," financial institutions, insurance companies, regulated investment companies, real estate investment trusts, mutual funds, broker-dealers, traders in securities or other persons that elect to use a mark-to-market method of accounting for their holdings in our common stock, persons who hold our common stock as "qualified small business stock" within the meaning of Section 1202 of the Code, persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction," or other risk reduction transaction or integrated investment, persons subject to the alternative minimum tax, persons who acquired our common stock through stock options or in other compensatory transactions or partnerships or other pass-through entities for U.S. federal income tax purposes.

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds shares of our common stock, the tax treatment of a partner will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partners in partnerships (including entities or arrangements treated as partnerships for U.S. federal income tax purposes) considering the purchase of our common stock should consult their tax advisors regarding the U.S. federal income tax considerations of the purchase, ownership and disposition of our common stock by such partnership.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS ARE ENCOURAGED TO CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL

GIFT OR ESTATE TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Distributions

Distributions of cash or property on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, the distributions will be treated as a nontaxable return of capital to the extent of the non-U.S. holder's tax basis in our common stock and thereafter as capital gain from the sale or exchange of such common stock. Please read "—Sales or other Taxable Dispositions." Subject to the withholding rules discussed below under "—Backup Withholding and Information Reporting" and "—Additional Withholding Requirements under FATCA" and with respect to effectively connected dividends, any distribution made to a non-U.S. holder on our common stock generally will be subject to U.S. withholding tax at a rate of 30% of the gross amount of the distribution unless an applicable income tax treaty provides for a lower rate. To receive the benefit of a reduced treaty rate, a non-U.S. holder must provide the applicable withholding agent with a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) certifying qualification for the reduced rate, and the non-U.S. holder will be required to update such forms and certifications from time to time as required by law. A non-U.S. holder eligible for a reduced rate of U.S. federal withholding tax pursuant to an applicable income tax treaty may be eligible to obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

If dividends paid to a non-U.S. holder are effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, are treated as attributable to a permanent establishment maintained by the non-U.S. holder in the United States), the non-U.S. holder will be exempt from the U.S. withholding tax described above, provided the non-U.S. holder satisfies certain certification requirements by providing the applicable withholding agent a properly executed IRS Form W-8ECI certifying eligibility for exemption, and the non-U.S. holder will be required to update such forms and certifications from time to time as required by law. Any such effectively connected dividends generally will be taxed on a net income basis at the rates and in the manner generally applicable to U.S. persons (as defined under the Code). If the non-U.S. holder is a corporation for U.S. federal income tax purposes, it may also be subject to a branch profits tax at a 30% rate (or such lower rate as specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include effectively connected dividends. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Sales or other Taxable Dispositions

Subject to the discussion below under "—Backup Withholding and Information Reporting", any gain realized by a non-U.S. holder on the sale or other disposition of our common stock generally will not be subject to U.S. federal income tax unless:

- 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 U.S. permanent establishment of the non-U.S. holder);
- the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or

- we are or have been a "United States real property holding corporation" for U.S. federal income tax purposes and certain other conditions are met.

A non-U.S. holder described in the first bullet point immediately above will be subject to tax on the gain derived from the sale or other disposition on a net income tax basis at the U.S. federal income tax rates applicable to U.S. citizens, nonresident aliens or domestic corporations, as applicable. In addition, if any non-U.S. holder described in the first bullet point immediately above is a foreign corporation, the gain realized by such non-U.S. holder may be subject to an additional branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty). An individual non-U.S. holder described in the second bullet point immediately above will be subject to a 30% (or such lower rate as may be specified by an applicable income tax treaty) tax on the gain derived from the sale or other disposition, which gain may be offset by U.S. source capital losses even though the individual is not considered a resident of the United States.

Generally, a corporation is a "United States real property holding corporation," or a USRPHC, if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business (all as determined for U.S. federal income tax purposes). We believe that we are not currently and will not become a USRPHC, and the remainder of this discussion assumes this is the case. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. If we are or become a USRPHC, however, so long as our common stock is regularly traded on an established securities market during the calendar year in which the sale or other disposition occurs, only a non-U.S. holder who actually or constructively holds or held (at any time during the shorter of the five-year period preceding the date of disposition or the holder's holding period) more than 5% of our common stock will be subject to U.S. federal income tax on the sale or other disposition of our common stock.

Backup Withholding and Information Reporting

Any dividends (or other distributions) paid to a non-U.S. holder must be reported annually to the IRS and to the non-U.S. holder. Copies of these information returns may be made available to the tax authorities in the country in which the non-U.S. holder resides or is established. Payments of dividends to a non-U.S. holder generally will not be subject to backup withholding if the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other applicable or successor form.

Payments of the proceeds from a sale or other disposition by a non-U.S. holder of our common stock effected by or through the office of a broker generally will be subject to information reporting and backup withholding (currently at the rate of 24%) unless the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other applicable or successor form and certain other conditions are met. Information reporting and backup withholding generally will not apply to any payment of the proceeds from a sale or other disposition of our common stock effected outside the United States by a non-U.S. office of a broker. However, unless such broker has documentary evidence in its records that the holder is not a U.S. person and certain other conditions are met, or the non-U.S. holder otherwise establishes an exemption, information reporting will apply to a payment of the proceeds of the disposition of our common stock effected outside the United States by such a broker if it has certain relationships within the United States. Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that the non-U.S. holder is a U.S. person who is not an exempt recipient under the Code and applicable Treasury regulations.

Backup withholding is not an additional tax. Rather, the U.S. income tax liability (if any) of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is timely furnished to the IRS.

Additional Withholding Requirements under FATCA

Sections 1471 through 1474 of the Code, and the Treasury regulations and administrative guidance issued thereunder, or FATCA, impose a 30% withholding tax on any dividends paid on our common stock if paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code) (including, in some cases, when such foreign financial institution or non-financial foreign entity is acting as an intermediary), unless (1) in the case of a foreign financial institution, such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners); (2) in the case of a non-financial foreign entity, such entity certifies that it does not have any "substantial United States owners" (as defined in the Code) or provides the applicable withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity (in either case, generally on an IRS Form W-8BEN-E) and provides certain information with respect to such United States owners; or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules and provides appropriate documentation (such as an IRS Form W-8BEN-E). The Treasury Secretary has issued proposed regulations providing that the withholding provisions under FATCA do not apply with respect to gross proceeds from a sale or other disposition of our common stock, which may be relied upon by taxpayers until final regulations are issued. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes.

INVESTORS CONSIDERING THE PURCHASE OF OUR COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE APPLICABILITY AND EFFECT OF U.S. FEDERAL GIFT AND ESTATE TAX LAWS AND ANY STATE, LOCAL OR NON-U.S. TAX LAWS AND TAX TREATIES.

UNDERWRITING

BofA Securities, Inc., Jefferies LLC, Credit Suisse Securities (USA) LLC and William Blair & Company, L.L.C., together the representatives, are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
BofA Securities, Inc.	
Jefferies LLC	
Credit Suisse Securities (USA) LLC	
William Blair & Company, L.L.C.	
LifeSci Capital LLC	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Total Without Option	Total With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us. We have agreed to reimburse the underwriters for certain of their expenses, up to $.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc. and Jefferies LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file or make a confidential submission of a registration statement related to the common stock, or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

The restrictions described in the immediately preceding paragraphs to do not apply to:

(i) as a *bona fide* gift or gifts;

(ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned ("immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin); or

(iii) as a distribution to limited partners or stockholders of the undersigned;

(iv) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by the undersigned;

(v) by will or intestate succession upon the death of the undersigned;

(vi) pursuant to a court or regulatory agency order, a qualified domestic order or in connection with a divorce settlement;

(vii) to the Company in connection with the vesting, settlement or exercise of options, warrants or other rights to acquire shares of common stock or any security convertible into or exercisable for shares of common stock of the Company by way of net exercise and/or to cover withholding

tax obligations in connection with such vesting, settlement or exercise pursuant to an employee benefit plan, option, warrant or other right disclosed in the prospectus for the public offering, *provided* that any such shares of the common stock issued upon exercise of such option, warrant or other right shall be subject to the restrictions set forth herein;

(viii) to the Company pursuant to agreements under which the Company has exercised its option to repurchase such shares or has exercised a right of first refusal with respect to transfers of such shares upon termination of service of the undersigned, so long as such agreement or right of first refusal is disclosed in the prospectus for the public offering;

(ix) pursuant to the automatic conversion of outstanding shares of preferred stock of the Company into common stock of the Company in connection with the public offering disclosed in the prospectus for the public offering, *provided* that the shares of the common stock received upon such conversion shall be subject to the restrictions set forth herein; or

(x) to a bona fide third party pursuant to a merger, consolidation, tender offer or other similar transaction made to all holders of shares of the common stock and involving a Change of Control (as defined below) of the Company and approved by the Company's board of directors; provided that, in the event that such Change of Control is not completed, the undersigned's lock-up securities shall remain subject to the restrictions contained herein, provided, further that any shares of the common stock not transferred in such merger, consolidation, tender offer or other transaction shall remain subject to the restrictions contained herein. "Change of Control" shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter pursuant to the Public Offering), of the Company's voting securities if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity).

Nasdaq Global Market Listing

We have applied to list to list our common stock on Nasdaq under the symbol "PYXO."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. 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 our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on Nasdaq, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their 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. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The

underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

European Economic Area

In relation to each Member State of the European Economic Area and the United Kingdom, each a "Relevant State," no shares of common stock have been offered or will be offered pursuant to the initial public offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation), except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

a. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require the issuer or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any shares of common stock or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the underwriters that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any shares of common stock being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

The Company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of common stock in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

References to the Prospectus Regulation includes, in relation to the UK, the Prospectus Regulation as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018.

The above selling restriction is in addition to any other selling restrictions set out below.

In connection with the offering, the underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

Notice to Prospective Investors in the United Kingdom

In relation to the United Kingdom, or UK, no shares of common stock have been offered or will be offered pursuant to the initial public offering to the public in the UK prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority in the UK in accordance with the UK Prospectus Regulation and the FSMA, except that offers of Shares may be made to the public in the UK at any time under the following exemptions under the UK Prospectus Regulation and the FSMA:

a. to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the underwriters for any such offer; or

c. at any time in other circumstances falling within section 86 of the FSMA,

provided that no such offer of Shares shall require the issuer or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Each person in the UK who initially acquires any Shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the underwriters that it is a qualified investor within the meaning of the UK Prospectus Regulation.

In the case of any Shares being offered to a financial intermediary as that term is used in Article 5(1) of the UK Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the Shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in the UK to qualified investors, in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

The Company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any Shares in the UK 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, 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, and the expression “FSMA” means the Financial Services and Markets Act 2000.

In connection with the offering, underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended, or FSMA, in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the 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 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.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, 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 the "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 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.

Notice to Prospective Investors in Hong Kong

The shares of common stock have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) 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 share of common stock has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares of common stock 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.

Notice to Prospective Investors in Japan

The shares of common stock 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" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares of common stock 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 shares of common stock, 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 shares of common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares of common stock 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.

Notice to Prospective Investors in Canada

The shares of common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares of common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

LEGAL MATTERS

Certain legal matters with respect to U.S. federal law in connection with this offering will be passed upon for us by Sidley Austin LLP, San Francisco, California. Latham & Watkins LLP, New York, New York, is acting as counsel to the underwriters in this offering.

EXPERTS

The consolidated financial statements of Pyxis Oncology, Inc. at December 31, 2019 and 2020, and for each of the two years in the period ended December 31, 2020, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document is not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as *an* exhibit is qualified in all respects by the filed exhibit. The SEC also maintains a website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at www.pyxisoncology.com. Upon completion of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

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INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

For the Six Months Ended June 30, 2020 and 2021

For the Years Ended December 31, 2019 and 2020

PYXIS ONCOLOGY, INC.

Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)
(Unaudited)

	December 31, 2020	June 30, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 8,080	$ 142,473
Prepaid expenses and other current assets	23	471
Total current assets	8,103	142,944
Property and equipment, net	1,103	1,313
Operating lease right-of-use assets	836	541
Deferred offering costs	—	2,142
Other assets, noncurrent	109	109
Total assets	$ 10,151	$ 147,049
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 1,077	$ 1,266
Accrued expenses and other current liabilities	1,997	2,237
Derivative liability, current portion	—	4,428
Operating lease liabilities, current portion	615	481
Total current liabilities	3,689	8,412
Derivative liability, net of current portion	—	2,202
Operating lease liabilities, net of current portion	165	—
Total liabilities	3,854	10,614
Commitments and contingencies (Note 12)		
Series A Convertible Preferred Stock, $0.001 par value per share; 22,724,926 shares authorized, 22,724,925 issued and outstanding as of December 31, 2020 and June 30, 2021, liquidation value of $22,000 as of December 31, 2020 and June 30, 2021	21,942	21,942
Series B Convertible Preferred Stock, $0.001 par value per share; zero and 104,812,248 shares authorized, issued and outstanding as of December 31, 2020 and June 30, 2021, respectively, liquidation value of $172,500 as of June 30, 2021	—	172,081
Stockholders' deficit:		
Common stock, $0.001 par value per share; 40,300,000 and 167,000,000 shares authorized at December 31, 2020 and June 30, 2021, respectively; 13,849,687 shares issued at December 31, 2020 and June 30, 2021 and 8,198,998 and 9,659,485 shares outstanding at December 31, 2020 and June 30, 2021, respectively	8	10
Additional paid-in capital	90	3,116
Accumulated deficit	(15,743)	(60,714)
Total stockholders' deficit	(15,645)	(57,588)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 10,151	$ 147,049

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PYXIS ONCOLOGY, INC.

Condensed Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)
(Unaudited)

	Six Months Ended June 30,	
	2020	**2021**
Operating expenses:		
Research and development	$ 3,484	$ 35,979
General and administrative	1,639	5,691
Total operating expenses	5,123	41,670
Loss from operations	(5,123)	(41,670)
Other income (expense):		
Interest income	65	10
Service fee income from related party	—	181
Change in fair value of derivative liability	—	(3,261)
Total other income (expense)	65	(3,070)
Loss from equity method investment in joint venture	—	(231)
Net loss and comprehensive loss	$ (5,058)	$ (44,971)
Net loss per common share, basic and diluted	$ (0.86)	$ (5.01)
Weighted average common shares outstanding, basic and diluted	5,875,177	8,975,369

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PYXIS ONCOLOGY, INC.

Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit
(In thousands, except share amounts)
(Unaudited)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at January 1, 2020	22,724,925	$ 21,942	—	$ —	5,267,544	$ 5	$ 36	$ (2,915)	$ (2,874)
Vesting of restricted common stock	—	—	—	—	978,439	1	—	—	1
Stock-based compensation	—	—	—	—	—	—	18	—	18
Issuance of common stock	—	—	—	—	311,076	—	3	—	3
Net loss	—	—	—	—	—	—	—	(5,058)	(5,058)
Balance at June 30, 2020	22,724,925	$ 21,942	—	$ —	6,557,059	$ 6	$ 57	$ (7,973)	$ (7,910)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at January 1, 2021	22,724,925	$ 21,942	—	$ —	8,198,998	$ 8	$ 90	$ (15,743)	$ (15,645)
Issuance of Series B convertible preferred stock, net of issuance costs of $419	—	—	104,812,248	172,081	—	—	—	—	—
Vesting of restricted common stock	—	—	—	—	1,460,487	2	4	—	6
Stock-based compensation	—	—	—	—	—	—	3,022	—	3,022
Net loss	—	—	—	—	—	—	—	(44,971)	(44,971)
Balance at June 30, 2021	22,724,925	$ 21,942	104,812,248	$172,081	9,659,485	$ 10	$ 3,116	$ (60,714)	$ (57,588)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PYXIS ONCOLOGY, INC.

Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2020	**2021**
Cash flows from operating activities		
Net loss	$ (5,058)	$ (44,971)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	30	330
Stock-based compensation	18	3,022
Non-cash research and development expenses	—	20,000
Non-cash lease expense	148	295
Non-cash loss from equity method investment in joint venture	—	50
Change in fair value of derivative liability	—	3,261
Changes in operating assets and liabilities:		
Prepaid and other current assets	(66)	(448)
Accounts payable	204	(364)
Accrued expenses	599	(114)
Operating lease liabilities	(138)	(299)
Derivative liability	—	3,369
Net cash used in operating activities	**(4,263)**	**(15,869)**
Cash flows from investing activities		
Purchase of property and equipment	(1,344)	(540)
Investment in joint venture	—	(50)
Net cash used in investing activities	**(1,344)**	**(590)**
Cash flows from financing activities		
Proceeds from issuance of Series B Convertible Preferred Stock, net of issuance costs	—	151,581
Deferred offering costs	—	(729)
Proceeds from issuance of common stock	3	—
Net cash provided by financing activities	**3**	**150,852**
Net (decrease) increase in cash, cash equivalents, and restricted cash	**(5,604)**	**134,393**
Cash, cash equivalents and restricted cash at beginning of period	19,720	8,188
Cash, cash equivalents and restricted cash at end of period	**$ 14,116**	**$ 142,581**
Supplemental schedule of noncash operating and financing activities:		
Deferred offering costs in accounts payable and accrued expenses	$ —	$ 1,413
Operating lease right-of-use asset obtained in exchange for new operating lease liabilities	$ 1,186	$ —
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 14,008	$ 142,473
Restricted cash	108	108
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	**$ 14,116**	**$ 142,581**

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PYXIS ONCOLOGY, INC.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

1. Nature of Business, Liquidity and Basis of Presentation

Nature of Business

Pyxis Oncology, Inc. (the "Company"), a Delaware corporation, was founded in June 2018 and launched its operations on July 2019. The Company is a preclinical oncology company focused on developing an arsenal of next-generation therapeutics to target difficult-to-treat cancers and improve quality of life for patients. The Company develops its product candidates with the objective to directly kill tumor cells, and to address the underlying pathologies created by cancer that enable its uncontrollable proliferation and immune evasion. Since the Company's launch in 2019, the Company has developed a broad portfolio of novel antibody drug conjugate, or ADC, product candidates and monoclonal antibody, or mAb, preclinical discovery programs that the Company is developing as monotherapies and in combination with other therapies.

Liquidity

As of June 30, 2021, the Company had an accumulated deficit of $60.7 million. The Company has incurred losses and negative cash flows from operations since inception, including net losses of $5.1 million and $45.0 million for the six months ended June 30, 2020 and 2021, respectively. The Company expects that its operating losses and negative cash flows will continue for the foreseeable future as the Company continues to expand its research and development programs and develop its product candidates. The Company currently expects that its cash and cash equivalents of $142.5 million as of June 30, 2021 will be sufficient to fund its operating expenses and capital requirements through at least twelve months from the date these unaudited condensed consolidated financial statements are issued, and therefore substantial doubt does not exist about the Company's ability to continue as a going concern. Additional funding will be necessary to fund future clinical and preclinical activities.

In the event the Company does or does not complete an initial public offering, the Company may pursue additional funding through private equity financings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. Although the Company has been successful in raising capital in the past, there is no assurance that the Company will be successful in obtaining such additional financing on terms acceptable to the Company, if at all, and the Company may not be able to enter into collaborations or other arrangements. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate its research and development programs, which could adversely affect its business prospects and its ability to continue operations.

Basis of Presentation

The condensed consolidated financial statements included in this report are unaudited and have been prepared in accordance with United States ("U.S.") generally accepted accounting principles ("U.S. GAAP") for interim financial reporting and U.S. Securities and Exchange Commission ("SEC") regulations. The condensed consolidated balance sheet data as of December 31, 2020 was derived from audited financial statements but does not include all disclosures required by U.S. GAAP. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. In the opinion of management, these financial statements include all adjustments, which are of a normal recurring nature, necessary for a fair presentation of the Company's financial position as of June 30, 2021, and its results of operations, statement of changes in convertible preferred stock and stockholders' deficit and cash flows for the six months ended June 30, 2020 and 2021. The condensed consolidated financial statements for the six

months ended June 30, 2021 should be read in conjunction with the audited consolidated financial statements appearing elsewhere in this prospectus. The results of operations for any interim period are not necessarily indicative of the results that could be expected for the full year.

2. Summary of Significant Accounting Policies

The Company's significant accounting policies are disclosed in the audited consolidated financial statements appearing elsewhere in this prospectus. Since the date of such audited consolidated financial statements, there have been no changes to the Company's significant accounting policies, except as noted below.

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC Topic 740, *Income Taxes* ("ASC 740") and by clarifying and amending existing ASC 740 guidance. The guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2020. Early adoption is permitted. The Company adopted this guidance as of January 1, 2021. The adoption of this guidance did not have a material impact on the Company's financial position or results of operations.

3. Fair Value Measurements

The following tables present the financial instruments carried at fair value on a recurring basis as of June 30, 2021 and December 31, 2020, respectively, in accordance with the FASB ASC 820 hierarchy (in thousands):

	Fair Value Measurements at June 30, 2021			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents	$138,443	$ —	$ —	$138,443
Liabilities				
Derivative liability	$	$ —	$ 6,630	$ 6,630

	Fair Value Measurements at December 31, 2020			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents	$ 6,996	$ —	$ —	$6,996

The Company's cash equivalents represent deposits in a short-term United States Treasury money market fund quoted in an active market and classified as a Level 1 asset. There were no assets or liabilities measured at fair value on a nonrecurring basis at June 30, 2020 and 2021. There were no transfers between Level 1 and Level 2 of the fair value hierarchy during the six months ended June 30, 2020 and 2021.

The fair value of the derivative liability was initially determined using a probability-weighted income approach and is revalued at each reporting date or more frequently if circumstances dictate. Changes in the fair value of the derivative liability are recorded as income or expense within other income (expense) in the unaudited condensed consolidated statements of operations and comprehensive loss. The significant unobservable inputs used in the fair value measurement of the derivative liability include probability of payment factors and the discount rate. Significant increases or decreases in any of those inputs would result in a

significantly lower or higher fair value measurement. As our operations progress, we may need to update the probability of payment factors and the discount rate used. This could result in a material increase or decrease to the derivative liability. Refer to Note 5, Licensing Agreements, for additional information on the derivative liability.

The following table provides a summary of changes in our Level 3 fair value measurements:

($ in millions)	
Balance as of January 1, 2021	$ —
Recognition of derivative liability	3,369
Change in fair value recorded in earnings	3,261
Balance as of June 30, 2021	$ 6,630

4. Joint Venture

In March 2021, the Company entered into definitive transaction agreements with Alloy Therapeutics, Inc. ("Alloy") and the Alloy Pyxis JV, to finance and operate a joint venture company, which we refer to as the Alloy Pyxis JV, formed in collaboration with Alloy to leverage the Company's technology and Alloy's ATX-Gx™ platform and antibody discovery services. The Alloy Pyxis JV granted to the Company and Alloy 50% of the voting membership units of the Alloy Pyxis JV in exchange for certain initial contributions. The Company's initial contribution included $50,000 and a non-exclusive fully paid-up license to certain intellectual property owned or controlled by the Company and the execution of the services agreement to enable the collaboration with the Alloy Pyxis JV. Alloy's initial contribution included $50,000 and the execution of the Alloy license agreement and the Alloy services agreement to enable the collaboration with the Alloy Pyxis JV. The Alloy Pyxis JV is governed by a board of directors consisting of an equal number of our representatives and Alloy's representatives. The protective provisions under the operating agreement of the Alloy Pyxis JV require the approval of both the Company and Alloy before the Alloy Pyxis JV may take certain actions. Refer to the audited consolidated financial statements appearing elsewhere in this prospectus for additional information on the Alloy Pyxis JV joint venture agreement.

The Company accounted for investment in the Alloy Pyxis JV under the equity method of accounting. The initial contribution was recorded as "Investment in equity method investment in joint venture". Additionally, the Company has recognized $0.2 million in service fee income from a related party within other income for services provided to the Alloy Pyxis JV during the six months ended June 30, 2021, for which the Alloy Pyxis JV issued a promissory note to the Company.

The Alloy Pyxis JV has incurred losses since inception and the Company's share in the losses of the Alloy Pyxis JV aggregated to $0.7 million as of June 30, 2021. The Company recognized its share of losses of the Alloy Pyxis JV only to the extent of the carrying value of its investment in the Alloy Pyxis JV and the promissory note issued by the Alloy Pyxis JV, which aggregated to $0.2 million as of June 30, 2021. The remaining unabsorbed loss will be offset against future income, if any. As the Company has no commitment to fund the losses of the equity method investment, the carrying value of the equity method investment has not been reduced below zero.

5. Licensing Agreements

The University of Chicago Agreement

In April 2020, the Company entered into a license agreement (the "University License Agreement"), as well as a sponsored research agreement, with the University of Chicago (the "University"). In partial consideration for the license from the University, the Company issued to the University 311,076 shares of its Common Stock in 2020. The Company recorded the value of the shares issued of $3 thousand as research and development

expenses during the year ended December 31, 2020. In addition, during 2020 and the six months ended June 30, 2021, the Company incurred costs of approximately $0.3 million and approximately $0.4 million, respectively, related to the University License Agreement, as well as the sponsored research agreement and other professional services involving the University. Refer to the audited consolidated financial statements appearing elsewhere in this prospectus for additional information on the University License Agreement.

The Company assessed the milestone and royalty events involving the University as of December 31, 2020 and June 30, 2021 and concluded no such payments were required.

Pfizer, Inc. Agreement

In December 2020, the Company entered into a license agreement (as amended, the "Pfizer License Agreement") with Pfizer, Inc. ("Pfizer"). The Pfizer License Agreement became effective in March 2021. During the six months ended June 30, 2021, the Company incurred a combined $25.0 million, which was recorded as research and development expenses, consisting of an upfront fee equal to a cash payment of $5.0 million and the issuance of 12,152,145 shares of Series B Convertible Preferred Stock with a value of $20.0 million in 2021 to Pfizer. Refer to the audited consolidated financial statements appearing elsewhere in this prospectus for additional information on the Pfizer License Agreement.

The Company assessed the milestone, royalty and other events involving Pfizer as of June 30, 2021 and concluded no such payments were required.

LegoChem Biosciences, Inc. Agreements

In December 2020, the Company entered into a license agreement (the "LegoChem License Agreement") and an opt-in, investment and additional consideration agreement (the "Opt-In Agreement") with LegoChem Biosciences, Inc. ("LegoChem"). Pursuant to the LegoChem License Agreement, the Company paid $0.5 million in December 2020 and $9.0 million in March 2021 to LegoChem and is required to purchase certain initial quantities of licensed product from LegoChem for an estimated cost of $7.0 million. The Company recorded the $0.5 million upfront payment as research and development expenses during the year ended December 31, 2020. The Company recorded the $9.0 million payment as research and development expenses during the six months ended June 30, 2021. The Company assessed the legal obligations related to the manufacturing of the initial quantities of licensed product as of June 30, 2021 and determined no such payments were required. The Company assessed the milestones and royalties under the LegoChem License Agreement as of December 31, 2020 and June 30, 2021 and concluded no such payments were required.

In addition, as part of the Opt-in Agreement, the Company recorded $0.5 million in accrued expenses in the consolidated balance sheet and related research and development expenses for such license fee in December 2020. The Company settled the outstanding liability of $0.5 million through the issuance of 303,804 shares of Series B Convertible Preferred Stock as part of its Series B financing in March 2021. LegoChem exercised its option in December 2020 under the Opt-In Agreement and paid $8.0 million to the Company in April 2021, in exchange for the right to receive a milestone payment (the "Extra Milestone Payment") of $9.6 million upon the earliest to occur of certain events, including the date of pricing or offer of the first public offering of its common stock or if the Company is the subject of a change in control transaction. The Company determined that the Extra Milestone Payment meets the definition and recognition condition of derivative under ASC 815, *"Derivatives and Hedging"* for which there was a binding contract and firm commitment. An initial derivative liability was recognized for $3.4 million with an offset to research and development expenses in January 2021. The derivative liability is re-measured at each reporting date, with changes recorded in "Other income (expense)" in the unaudited condensed consolidated statements of operations and comprehensive loss. As of June 30, 2021, the derivative liability for the Extra Milestone Payment was $6.6 million in the unaudited condensed consolidated balance sheet. The Company assessed the milestones and royalties under the Opt-In Agreement as of December 31, 2020 and June 30, 2021 and concluded no such payments were required.

6. Convertible Preferred Stock

Convertible preferred stock consisted of the following as of December 31, 2020 and June 30, 2021 (in thousands, except share and per share amounts):

December 31, 2020	Authorized Shares	Shares Issued and Outstanding	Liquidation Value	Carrying Value	Common Stock Issuable Upon Conversion
Series A	22,724,926	22,724,925	$ 22,000	$ 21,942	22,724,925

June 30, 2021	Authorized Shares	Shares Issued and Outstanding	Liquidation Value	Carrying Value	Common Stock Issuable Upon Conversion
Series A	22,724,926	22,724,925	$ 22,000	$ 21,942	22,724,925
Series B	104,812,248	104,812,248	$ 172,500	$ 172,081	104,812,248

Series A Convertible Preferred Stock

In June 2019, the Company entered into a securities purchase agreement (as amended, "Series A Agreement") with certain investors to sell shares of Series A convertible preferred stock ("Series A") at $0.9681 per share. In June and July 2019, the Company issued 22,724,926 shares of Series A to institutional investors at $0.9681 per share for gross cash proceeds of $22.0 million, less issuance costs of $0.1 million, resulting in net proceeds of $21.9 million.

Series B Convertible Preferred Stock

On March 5, 2021, the Company entered into a securities purchase agreement (as amended, "Series B Agreement") with certain investors to sell shares of Series B convertible preferred stock ("Series B") at $1.6458 per share. In March 2021, the Company issued 92,356,299 shares of Series B to institutional investors at $1.6458 per share for gross cash proceeds of $152.0 million, less issuance costs of $0.4 million, resulting in net proceeds of $151.6 million. In addition, the Company granted 12,455,949 shares, or $20.5 million, of Series B convertible preferred stock through separate agreements with Pfizer, Inc. and LegoChem Biosciences Inc.

Rights, Preferences, Privileges and Restrictions

Voting—Each preferred stockholder is 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 at the time of such vote**.** All preferred stockholders are entitled to vote on all matters upon which holders of common stock have the right to vote, other than matters that must by law be voted by class or series vote.

Dividends—The holders of preferred stock are entitled to receive dividends, when and if declared by the board of directors of the Company, prior and in preference to any dividend on the common stock of the Company, in an amount equal to $0.9681 per share of Series A per annum, or $1.6458 per share of Series B annum, subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization. The dividends are non-cumulative, and no such dividends have been declared to date. After payment of dividends on the Series A and Series B, any additional dividends shall be distributed among all holders of common stock and preferred stock based on the number of shares of common stock that would be held by each such holder if all shares of preferred stock were converted to common stock.

Liquidation Preference—In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company, or a deemed liquidation event of the Company (which includes certain mergers, acquisitions

and asset transfers), the holders of preferred stock shall be entitled to receive on a *pari passu* basis, out of the assets or consideration available for distribution in connection with such event and before any payment will be made to the holders of common stock, an amount per share equal to the original issuance price of the preferred stock ($0.9681 per share for the Series A and $1.6458 per share for the Series B), plus any declared but unpaid dividends on such shares. The treatment of an event as a deemed liquidation event may be waived by the vote or written consent of the holders of at least 66% of the Series B (the "Requisite Preferred Holders").

If the assets or consideration available for distribution to the stockholders are insufficient to pay the Series B and Series A liquidation amounts in full, then the holders of Series B and Series A shall share ratably in any distribution of the assets in proportion to the respective amounts which would otherwise be payable in respect of the shares of Series B and Series A held by them upon distribution if all amounts payable were paid in full.

After payment of the Series B and Series A liquidation amounts in full, all of the remaining assets of the Company available for distribution to the stockholders shall be distributed among the holders of the preferred stock and common stock, pro rata based on the number of shares held by each such holder on an as converted to common stock basis.

Conversion—Shares of preferred stock are convertible into common stock at the option of the holder at any time and without payment of any additional consideration. Each share of Series A is convertible into a number of fully paid shares of common stock as is determined by dividing the Series A original issuance price ($0.9681) by the Series A conversion price (initially equal to $0.9681). Each share of Series B is convertible into a number of fully paid shares of common stock as is determined by dividing the Series B original issuance price ($1.6458) by the Series B conversion price (initially equal to $1.6458). Further, the conversion rates of preferred stock are subject to adjustment based upon the occurrence of certain future events as defined in the Company's certificate of incorporation.

Shares of preferred stock are automatically converted into shares of common stock at the earlier of (i) the closing of a firm-commitment underwritten public offering resulting in at least $85 million of gross proceeds in the aggregate to the Company, prior to deductions for underwriting discounts, commission and expenses or (ii) the date and time, or occurrence of an event, specified by a vote of the Series B and Series A Stockholders.

7. Common Stock

The Company is authorized to issue up to 167,000,000 shares of common stock, of which 13,849,687 and shares were issued at December 31, 2020 and June 30, 2021, respectively, and 8,198,998 and 9,659,485 shares were outstanding at December 31, 2020 and June 30, 2021.

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.

Voting—Each holder of outstanding shares of common stock shall be entitled to one vote in respect of each share. The holders of outstanding shares of common stock, voting together as a single class, shall be entitled to elect one director. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of a majority of the outstanding shares of common stock and preferred stock voting together as a single class.

Reserved Shares—As of June 30, 2021, the Company reserved the following shares of common stock for issuance upon conversion of the outstanding convertible preferred stock and exercise of stock options:

Series A convertible preferred stock	22,724,925
Series B convertible preferred stock	104,812,248
Unvested restricted stock options	4,190,202
Stock options available for issuance	5,018,612
Stock options outstanding	17,537,516
Total	154,283,503

8. Stock-Based Compensation

In 2019, the Company established the 2019 Plan, under which the Company grant options and restricted stock to its employees and certain non-employees. The maximum number of shares of common stock reserved for issuance under the 2019 Plan is 25,705,677 shares. There were 5,018,612 shares of common stock remaining and available for issuance under the 2019 Plan at June 30, 2021.

The Company may grant options to purchase authorized but unissued shares of the Company's common stock. Options granted under the 2019 Plan include incentive stock options that can be granted only to the Company's employees and non-statutory stock options that can be granted to the Company's employees, consultants, advisors and directors. The 2019 Plan also permits the Company to issue restricted stock awards.

The exercise prices, vesting and other restrictions of the awards to be granted under the 2019 Plan are determined by the board of directors, except that no stock option may be issued with an exercise price less than the fair market value of the common stock at the date of the grant or have a term in excess of ten years. Options granted under the 2019 Plan are exercisable in whole or in part at any time subsequent to vesting.

Stock Options

The summary of stock option activity for the six months ended June 30, 2021(in thousands, except share and per share amounts):

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2021	1,401,518	$ 0.10	9.38	$ 348
Granted	16,135,998	$ 0.84		
Outstanding at June 30, 2021	17,537,516	$ 0.78	9.68	$ 10,330
Options exercisable at June 30, 2021	5,328,578	$ 0.76	9.64	$ 3,245

The Company has recorded stock-based compensation expense related to stock options of $5 thousand and $3.0 million for the six months ended June 30, 2020 and 2021, respectively. The Company has an aggregate $6.2 million of gross unrecognized stock-based compensation expense as of June 30, 2021 remaining to be amortized over a weighted average period of 1.9 years.

The weighted average grant-date fair value of the options granted was $0.01 and $0.56 per share for the six months ended June 30, 2020 and 2021, respectively.

The following table provides the assumptions used in determining the fair value of option awards throughout the six months ended June 30, 2021:

	June 30, 2020	June 30, 2021
Expected volatility	82.8% – 86.8%	77.0%
Risk-free interest rate	0.56%	1.05% – 1.16%
Expected dividend yield	—	—
Expected term (in years)	5.570 – 6.08	6.02 – 6.08

Stock-based compensation expense related to stock options recorded in the unaudited condensed consolidated statements of operations for the six months ended June 30, is as follows (in thousands):

	Six Months Ended June 30,	
	2020	2021
Research and development	$ 1	$ 1,010
General and administrative	4	1,987
Total	$ 5	$ 2,997

The Company has not recognized and does not expect to recognize in the near future, any tax benefit related to employee stock-based compensation expense as a result of the full valuation allowance related to its net deferred tax assets.

Restricted Stock Awards

The Company issued 6,325,000 shares of restricted common stock to the employee co-founders and certain non-employee consultants in 2019. The shares of restricted common stock were issued pursuant to standalone restricted stock purchase agreements that are independent of the 2019 Plan. The shares of restricted common stock carried a purchase price equivalent of $0.002 per share. The compensation cost was measured based on the fair value of the underlying common stock less the purchase price of the restricted common stock and the Company recognizes compensation costs over the requisite service period.

Under the terms of the restricted stock purchase agreements, the Company has a repurchase option whereby it has the right to repurchase any unvested shares upon termination at a price per share equal to the lesser of: (i) the fair market value of the Company's common stock on the date of repurchase and (ii) the original purchase price. The shares of restricted common stock issued to the Company's co-founders and non-employee consultants vest based on a predefined number of shares.

The Company recognized an associated deposit liability for restricted stock awards issued pursuant to standalone restricted stock purchase agreements upon issuance based on the purchase price of the awards as the unvested shares are subject to repurchase upon termination. As the awards of restricted stock vest, the Company reclassifies the deposit liability to additional paid-in capital.

The summary of restricted stock activity for the six months ended June 30, 2021:

	Restricted Stock Number of Shares
Non-vested, January 1, 2021	5,650,689
Vested	(1,460,487)
Non-vested, June 30, 2021	4,190,202

The Company has recorded stock-based compensation expense related to the restricted stock of $13 thousand for the six months ended June 30, 2020 and June 2021.

9. Income Taxes

The Company's effective tax rate from continuing operations was 0% for each of the six months ended June 30, 2020 and 2021. The Company recorded no income tax provision for the six months ended June 30, 2020 and 2021. The Company continues to maintain a full valuation allowance for its U.S. federal and state deferred tax assets.

The Company has not recorded any reserves for uncertain tax positions. The Company files corporate income tax returns in the United States, Illinois, Maryland and Massachusetts. All tax years since the date of incorporation remain open to examination by the major taxing jurisdictions (federal and state).

10. Net Loss per Common Share

Basic and diluted net loss per common share was calculated as follows (in thousands, except share and per share amounts):

	Six Months Ended June 30,	
	2020	**2021**
Numerator:		
Net loss	$ (5,058)	$ (44,971)
Denominator:		
Weighted-average common shares outstanding, basic and diluted	5,875,177	8,975,369
Net loss per common share, basic and diluted	$ (0.86)	$ (5.01)

The Company's potentially dilutive securities, which include convertible preferred stock, restricted stock, and stock options, have been excluded from the computation of diluted net loss per common share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same.

The Company excluded the following from the computation of diluted net loss per share attributable to common stockholders at June 30, 2020 and 2021 because including them would have had an anti-dilutive effect:

	June 30,	
	2020	**2021**
Convertible Preferred Stock	22,724,925	127,537,173
Unvested Restricted Stock	4,204,017	4,190,202
Stock options outstanding	3,846,391	17,537,516
Stock options available for issuance	930,967	5,018,612
Total	31,706,300	154,283,503

11. Related Parties

For the year ended December 31, 2020 and the six months ended June 30, 2021, the Company appointed directors to its Board who are also employees of significant investors in the Company's 2019 Series A and 2021 Series B financings.

In 2020, the Company entered into agreements with several Scientific Advisory Board ("SAB") members and paid them monthly amounts, ranging from $2,500 to $5,000 per month. No board member was paid more than $0.1 million individually in either 2020 or the six months ended June 30, 2021 and, in the aggregate, all board members were paid less than $0.4 million for both periods combined.

In 2020, the Company entered into the University License Agreement, as well as a sponsored research agreement, with the University, which had previously purchased 309,885 shares of the Company's Series A Preferred Stock as part of the Company's 2019 Series A Financing. In partial consideration for the license from the University, the Company issued to the University 311,076 shares of its Common Stock in 2020. Refer to Note 5 of the unaudited condensed consolidated financial statements.

In 2020, the Company entered into the Pfizer License Agreement. As the effective date of the Pfizer License Agreement was in March 2021 and as the Company did not incur any obligations under the contract as of December 31, 2020, there were no amounts recorded in research and development expenses for the year ended December 31, 2020. During the six months ended June 30, 2021, the Company incurred a combined $25.0 million, consisting of an upfront fee equal to a cash payment of $5.0 million and the issuance of 12,152,145 shares of Series B Convertible Preferred Stock with a value of $20.0 million in 2021 to Pfizer. Refer to Note 5 of the unaudited condensed consolidated financial statements.

In 2020, the Company entered into the LegoChem License Agreement and the Opt-In Agreement with LegoChem. Pursuant to the LegoChem License Agreement, the Company paid $0.5 million in 2020 and $9.0 million in 2021 to LegoChem. The Company settled the outstanding liability of $0.5 million through the issuance of 303,804 shares Series B Convertible Preferred Stock as part of its Series B financing in March 2021. LegoChem exercised its option in December 2020 under the Opt-In Agreement and paid $8.0 million to the Company in April 2021, in exchange for the right to receive a milestone payment of $9.6 million upon the earliest to occur of the certain events, including the date of pricing or offer of the first public offering of its common stock or if the Company is the subject of a change of control transaction. Refer to Note 5 of the unaudited condensed consolidated financial statements.

12. Commitments and Contingencies

Commitments

In the normal course of business, the Company enters into agreements with CROs, research programs and with vendors for nonclinical studies, manufacturing and other services and products for operating purposes, which agreements are generally cancellable by the Company at any time, subject to payment of remaining obligations under binding purchase orders and, in certain cases, nominal early-termination fees. These commitments are not deemed significant.

Contingencies

In March 2020, COVID-19 disease was declared a pandemic by the World Health Organization. The COVID-19 pandemic is disrupting supply chains and affecting production and sales across a range of industries. Currently, the Company has not suffered significant adverse consequences as a result of the COVID-19 pandemic, but the extent of the impact of COVID-19 on the Company's future operational and financial performance will depend on certain developments, including the duration and spread of the pandemic, including its variants, impact on employees and vendors all of which are uncertain and cannot be predicted. At this point, the extent to which COVID-19 may impact the Company's future financial condition or results of operations is uncertain.

Operating Leases

As of June 30, 2021, the Company had three operating leases, where the Company is the lessee or sublessee, for office and laboratory space. Lease terms are through 2022. The Company had no finance leases as of June 30, 2021.

The Company's rent expense was $0.3 million and $0.4 million for the six months ended June 30, 2020 and June 30, 2021.

Maturities of lease liabilities as of June 30, 2021 were as follows (in thousands):

Year Ending December 31,	
2021 (remaining six months)	$333
2022	168
Total lease payments	501
Less: amount representing imputed interest	(20)
Total future minimum lease obligations	$481

Legal Proceedings

The Company is not currently subject to any material legal proceedings.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Pyxis Oncology, Inc.

Opinion on the Consolidated financial statements

We have audited the accompanying consolidated balance sheets of Pyxis Oncology, Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2021.

Boston, Massachusetts
June 21, 2021

PYXIS ONCOLOGY, INC.

Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	December 31,	
	2019	**2020**
Assets		
Current assets:		
Cash and cash equivalents	$19,690	$ 8,080
Prepaid expenses and other current assets	11	23
Total current assets	19,701	8,103
Property and equipment, net	62	1,103
Operating lease right-of-use assets	14	836
Other assets, noncurrent	30	109
Total assets	$19,807	$ 10,151
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 491	$ 1,077
Accrued expenses and other current liabilities	233	1,997
Current portion of operating lease liabilities	9	615
Total current liabilities	733	3,689
Operating lease liabilities, net current portion	6	165
Total liabilities	739	3,854
Commitments and contingencies (Note 7)		
Series A Convertible Preferred Stock, $0.001 par value per share; 22,724,926 shares authorized, 22,724,925 issued and outstanding as of December 31, 2019 and 2020, liquidation value of $22,000 as of December 31, 2019 and 2020	21,942	21,942
Stockholders' deficit:		
Common stock, $0.001 par value per share; 40,300,000 shares authorized; 10,450,000 and 13,849,687 shares issued at December 31, 2019 and 2020, respectively and 5,267,544 and 8,198,998 shares outstanding at December 31, 2019 and 2020, respectively	5	8
Additional paid-in capital	36	90
Accumulated deficit	(2,915)	(15,743)
Total stockholders' deficit	(2,874)	(15,645)
Total liabilities, convertible preferred stock and stockholders' deficit	$19,807	$ 10,151

The accompanying notes are an integral part of these consolidated financial statements.

PYXIS ONCOLOGY, INC.

Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)

	Year Ended December 31,	
	2019	**2020**
Operating expenses:		
Research and development	$ 1,224	$ 9,048
General and administrative	1,655	3,846
Total operating expenses	2,879	12,894
Loss from operations	(2,879)	(12,894)
Other income:		
Interest income	107	66
Total other income	107	66
Net loss and comprehensive loss	$ (2,772)	$ (12,828)
Net loss per share, basic and diluted	$ (0.65)	$ (1.96)
Weighted average shares of common stock outstanding, basic and diluted	4,271,897	6,553,346

The accompanying notes are an integral part of these consolidated financial statements.

PYXIS ONCOLOGY, INC.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit
(In thousands, except share amounts)

	Series A Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at January 1, 2019	—	$ —	1,993,676	$ 2	$ 5	$ (143)	$ (136)
Issuance of Series A convertible preferred stock, net of issuance costs of $58	22,724,925	21,942	—	—	—	—	—
Vesting of restricted of common stock	—	—	3,273,868	3	3	—	6
Stock-based compensation expense	—	—	—	—	28	—	28
Net loss	—	—	—	—	—	(2,772)	(2,772)
Balance at December 31, 2019	22,724,925	$ 21,942	5,267,544	$ 5	$ 36	$ (2,915)	$ (2,874)
Issuance of common stock	—	—	311,984	—	3	—	3
Vesting of restricted common stock	—	—	2,619,470	3	7	—	10
Stock-based compensation expense	—	—	—	—	44	—	44
Net loss	—	—	—	—	—	(12,828)	(12,828)
Balance at December 31, 2020	22,724,925	$ 21,942	8,198,998	$ 8	$ 90	$ (15,743)	$ (15,645)

The accompanying notes are an integral part of these consolidated financial statements.

PYXIS ONCOLOGY, INC.

Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,	
	2019	**2020**
Operating activities		
Net loss	$ (2,772)	$ (12,828)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	—	469
Stock-based compensation expense	28	44
Non-cash lease expense	—	(56)
Changes in operating assets and liabilities:		
Prepaid and other current assets	(11)	(13)
Accounts payable	292	558
Accrued expenses	224	1,742
Net cash used in operating activities	(2,239)	(10,084)
Investing activities		
Purchase of property and equipment	—	(1,483)
Net cash used in investing activities	—	(1,483)
Financing activities		
Proceeds from issuance of Series A Convertible Preferred Stock, net of issuance costs	21,942	—
Proceeds from issuance of common stock	—	3
Proceeds from issuance of restricted stock	13	32
Net cash provided by financing activities	21,955	35
Net increase (decrease) in cash, cash equivalents, and restricted cash	19,716	(11,532)
Cash, cash equivalents and restricted cash at beginning of year	4	19,720
Cash, cash equivalents and restricted cash at end of year	$ 19,720	$ 8,188
Supplemental schedule of noncash investing and financing activities:		
Purchases of property and equipment in accounts payable and accrued expenses	$ 62	$ 28
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 19,690	$ 8,080
Restricted cash	30	108
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	$ 19,720	$ 8,188

The accompanying notes are an integral part of these consolidated financial statements.

PYXIS ONCOLOGY, INC.

Notes to Consolidated Financial Statements

1. Nature of Business and Basis of Presentation

Nature of Business

Pyxis Oncology, Inc. (the "Company"), a Delaware corporation, was founded in June 2018 and launched its operations on July 2019. The Company is a preclinical oncology company focused on developing an arsenal of next-generation therapeutics to target difficult-to-treat cancers and improve quality of life for patients. The Company develops its product candidates with the objective to directly kill tumor cells, and to address the underlying pathologies created by cancer that enable its uncontrollable proliferation and immune evasion. Since the Company's launch in 2019, the Company has developed a broad portfolio of novel antibody drug conjugate, or ADC, product candidates and monoclonal antibody, or mAb, preclinical discovery programs that the Company is developing as monotherapies and in combination with other therapies.

The Company is subject to risks common to companies in the therapeutic industry, including, but not limited to, risks related to the successful development and commercialization of product candidates, fluctuations in operating results and financial risks, the ability to successfully raise additional funds when needed, protection of proprietary rights and patent risks, patent litigation, compliance with government regulations, dependence on key personnel and prospective collaborative partners, and competition from competing products in the marketplace.

The Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern within one year after the date the consolidated financial statements are issued. As of December 31, 2020, the Company had an accumulated deficit of $15.7 million. The Company has incurred losses and negative cash flows from operations since inception, including net losses of $2.8 million and $12.8 million for the years ended December 31, 2019 and 2020, respectively. The Company expects that its operating losses and negative cash flows will continue for the foreseeable future as the Company continues to expand its research and development programs and develop its product candidates. The Company currently expects that its cash and cash equivalents of $8.1 million as of December 31, 2020 along with the net proceeds received in connection with the Company's issuance of Series B Convertible Preferred Stock of approximately $151.6 million, which closed on March 5, 2021 will be sufficient to fund its operating expenses and capital requirements through at least twelve months from the date these consolidated financial statements are issued, and therefore substantial doubt does not exist about the Company's ability to continue as a going concern. Additional funding will be necessary to fund future clinical and preclinical activities.

In the event the Company does or does not complete an initial public offering, the Company may pursue additional funding through private equity financings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. Although the Company has been successful in raising capital in the past, there is no assurance that the Company will be successful in obtaining such additional financing on terms acceptable to the Company, if at all, and the Company may not be able to enter into collaborations or other arrangements. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate its research and development programs, which could adversely affect its business prospects and its ability to continue operations.

Basis of Presentation

The accompanying consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, expense, and related disclosures. The Company bases estimates and assumptions on historical experience when available and on various factors that it believes to be reasonable under the circumstances. The Company evaluates its estimates and assumptions on an ongoing basis. Estimates relied upon in preparing these consolidated financial statements relate to, but are not limited to, the fair value of common stock, stock-based compensation expense, accrued expenses, lease accounting, and the recoverability of the Company's net deferred tax assets and related valuation allowance. Actual results may differ from these estimates under different assumptions or conditions.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of 90 days or less to be cash equivalents. Cash equivalents consist primarily of money market funds at December 31, 2019 and 2020.

Concentration of Credit Risks

Financial instruments that subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents. The Company's cash and cash equivalents are held at an accredited financial institution and the Company has not experienced any losses in such accounts. The Company maintains its cash in bank deposit accounts, which at times may exceed federally insured limits. The Company believes it is not exposed to any significant risk in cash and cash equivalents.

Fair Value of Financial Instruments

Fair value is defined as the price received to sell an investment in a timely transaction or pay to transfer a liability in a timely transaction with an independent buyer in the principal market, or in the absence of a principal market, the most advantageous market for the investment or liability. A framework is used for measuring fair value utilizing a three-tier hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy are as follows:

***Level* 1**—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

***Level* 2**—Quoted prices in markets that are not considered to be active or financial instrument valuations for which all significant inputs are observable, either directly or indirectly; and

***Level* 3**—Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Financial instruments are categorized in their entirety based on the lowest level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and considers factors specific to the investment. 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.

Segment information

The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions.

Comprehensive Loss

There were no differences between net loss and comprehensive loss presented in the consolidated statements of operations for 2019 and 2020.

Property and Equipment, net

Property and equipment are recorded at cost less accumulated depreciation. Depreciation expense is recognized using the straight-line method over the estimated useful lives of the related assets as follows:

	Estimated Useful Life (Years)
Laboratory equipment	3
Furniture and office equipment	3
Leasehold improvements	Shorter of remaining life of lease or useful life

Depreciation expense is included in research and development and general and administrative expenses. Major additions and upgrades are capitalized; maintenance and repairs, which do not improve or extend the life of the respective assets, are expensed as incurred. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in income (loss) from operations.

Impairment of Long-Lived Assets

The Company evaluates the long-lived assets, which consist of property and equipment and operating lease right-of-use assets, for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in the use of the assets. Management then determines whether the remaining useful life continues to be appropriate, or whether there has been an impairment of long-lived assets based primarily upon whether expected future undiscounted cash flows are sufficient to support the assets' recovery. Recoverability of these assets is measured by comparison of the carrying amount of the asset to the future undiscounted cash flows the asset is expected to generate. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. The Company recognized no impairment losses for the years ended December 31, 2019 and 2020.

Leases

Operating lease right-of-use assets are initially measured at cost, which comprises the initial amount of the lease liability adjusted for lease payments made at or before the lease commencement date, plus any initial direct costs incurred less any lease incentives received. Operating lease right-of-use assets are subsequently measured throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. Lease expense for lease payments is recognized on a straight-line basis over the lease term. Operating lease liabilities are initially measured at the present value of the unpaid lease payments at the lease commencement date. The Company had no finance leases as of December 31, 2019 and 2020.

Judgments used in applying ASU No. 2016-02, “Leases” (“ASC 842”) include determining: i) whether a contract is, or contains, a lease; ii) the discount rate to be used to discount the unpaid lease payments to present value; iii) the lease term; and iv) the lease payments. The Company determine if a contract is, or contains, a lease at contract inception. A lease exists when a contract conveys to the customer the right to control the use of identified property, plant, or equipment for a period of time in exchange for consideration. The definition of a lease embodies two conditions: 1) there is an identified asset in the contract that is land or a depreciable asset (i.e., property, plant, and equipment); and 2) the customer has the right to control the use of the identified asset. ASC 842 requires a lessee to discount its unpaid lease payments using the interest rate implicit in the lease or, if that rate cannot be readily determined, an incremental borrowing rate, which reflects the fixed rate at which the Company could borrow, on a collateralized basis, the amount of the lease payments in the same currency, for a similar term, and in a similar environment. As all of the Company’s operating leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The lease term for the operating leases includes the noncancellable period of the lease plus any additional periods covered by either a lessee option to extend (or not to terminate) the lease that the lessee is reasonably certain to exercise, or an option to extend (or not to terminate) the lease controlled by the lessor. Lease payments included in the measurement of the operating lease right-of-use assets and lease liabilities are comprised of fixed payments (including in-substance fixed payments), variable payments that depend on an index or rate, and the exercise price of a lessee option to purchase the underlying asset if the lessee is reasonably certain to exercise. Variable components of lease expense are excluded from lease payments and are recognized in the period incurred.

The Company has elected to adopt the practical expedient for the combination of lease and non-lease components. This practical expedient was applied consistently to all leases.

The Company has elected not to recognize operating lease right-of-use assets and operating lease liabilities for short-term leases (a lease with an initial lease term of 12 months or less) on the consolidated balance sheets. The Company recognizes the lease payments associated with short-term leases as an expense over the lease term.

Patent Costs

Costs to secure and maintain patents covering the Company’s technology and product candidates are expensed as incurred and are classified as general and administrative expenses in the consolidated statements of operations.

Research and Development Expenses

The Company expenses research and development expenses as incurred. The Company’s research and development expenses consist primarily of costs incurred in performing research and development activities, including personnel-related expenses such as salaries, stock-based compensation and benefits, facilities costs, depreciation and external costs of outside vendors engaged to conduct preclinical development activities. The Company accrues expenses related to development activities performed by third parties based on an evaluation of services received and efforts expended pursuant to the terms of the contractual arrangements. Payments under some of these contracts depend on preclinical trial milestones. There may be instances in which payments made to the Company’s vendors will exceed the level of services provided and result in a prepayment of expenses. In accruing service fees, the Company estimates the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, the Company will adjust the accrual or prepaid expense accordingly.

Stock-Based Compensation

At December 31, 2019 and 2020, the Company had one stock-based compensation plan, the 2019 Equity Incentive Plan, or the 2019 Plan, which is more fully described in Note 11.

For awards issued under the 2019 Plan stock options and restricted stock awards and standalone restricted stock purchase agreements, the fair value of each award is estimated on the date of grant. For restricted stock awards issued pursuant to standalone restricted stock purchase agreements, the fair value of each award was estimated based on the estimated fair value of the Company's common stock, less the amount paid by the grantee. The Company recognized compensation expense and an associated deposit liability for restricted stock awards issued pursuant to standalone restricted stock purchase agreements upon issuance based on the aggregate grant date fair value due to previous instances of the Company repurchasing unvested shares of restricted stock upon termination and the associated non-substantive service condition. As the awards of restricted stock vest, the Company reclassifies the deposit liability to additional paid-in capital.

The Company recognizes forfeitures related to stock-based compensation awards as they occur and reverses any previously recognized compensation cost associated with forfeited awards in the period the forfeiture occurs.

The Company classifies stock-based compensation expense in the statement of operations in the same manner in which the award recipients' payroll costs are classified or in which the award recipients' service payments are classified.

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option-pricing model ("Black-Scholes"). The following summarizes the inputs used:

Expected Volatility—The Company lacks company-specific historical and implied volatility information. Therefore, the Company estimates the expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until the Company has adequate historical data regarding the volatility of the Company's traded stock price.

Expected Term—The Company uses the simplified method described in the SEC's Staff Accounting Bulletin No. 107, *Share-Based Payment* ("SAB 107"), to determine the expected life of the option grants.

Risk-Free Interest Rate—The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.

Dividends—Expected dividend yield is zero because the Company has not paid cash dividends on shares of common stock and does not expect to pay any cash dividends in the foreseeable future.

Grant Date Fair Value—The grant date fair value utilized in Black-Scholes is determined by the board of directors with the assistance of management. The grant date fair value of the shares of common stock is determined using valuation methodologies which utilize certain assumptions including probability weighting of events, volatility, time to liquidation, a risk-free interest rate and an assumption for a discount for lack of marketability. In determining the fair value of the shares of common stock, the methodologies used to estimate the enterprise value were performed using methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation.

Income Taxes

The Company accounts for income taxes in accordance with FASB ASC 740, *Income Taxes* ("ASC 740"). ASC 740 requires the use of the asset and liability method of accounting for income taxes. The current or deferred tax consequences of a transaction are measured by applying the provisions of enacted tax laws to determine the amount of taxes payable currently or in future years. Deferred tax assets and liabilities are determined based on the difference between the consolidated financial statements and tax basis of assets and liabilities and expected future tax consequences of events that have been included in the consolidated financial

statements or tax returns using enacted tax rates in effect for the year in which the differences are expected to reverse. Under this method, a valuation allowance is used to offset deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Management annually evaluates the recoverability of deferred taxes and the adequacy of the valuation allowance (see Note 12).

The Company follows the provisions of ASC 740 relative to accounting for uncertain tax positions. These provisions provide guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions.

Classification and Accretion of Convertible Preferred Stock

Classification of the Company's convertible preferred stock is being treated as mezzanine financing and not as part of stockholders' equity (deficit) because the holders of such shares have liquidation rights in the event of a deemed liquidation that, in certain situations, are not solely within the control of the Company and would require the redemption of the then-outstanding convertible preferred stock. The convertible preferred stock is not redeemable, except in the event of certain deemed liquidation events enumerated in the Company's certificate of incorporation. Because the occurrence of a deemed liquidation event is not currently probable, the carrying values of the convertible preferred stock are not being accreted to their redemption values. Subsequent adjustments to the carrying values of the convertible preferred stock would be made only when a deemed liquidation event becomes probable.

Net 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 according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income (loss) available to common stockholders for the period to be allocated between common stock and participating securities based upon their respective rights to share in the earnings as if all income (loss) for the period had been distributed.

Basic net income (loss) per share attributable to common stockholders is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period. 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.

The Company's participating securities contractually entitle the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such 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 anti-dilutive. As the Company reported a net loss attributable to common stockholders for the years ended December 31, 2019 and 2020, diluted net loss per share attributable to common stockholders was the same as basic net loss per share attributable to common stockholders, since dilutive common shares were not assumed to have been issued as their effect was anti-dilutive.

Recently Adopted Accounting Pronouncements

The Jumpstart Our Business Startups Act of 2012 permits an emerging growth company to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public

companies until those standards would otherwise apply to private companies. As an emerging growth company, the Company has elected to take advantage of this extended transition period.

In February 2016, the FASB issued guidance on the accounting for leases, Accounting Standards Codification ("ASC") Topic 842 ("ASC 842"). This guidance requires lessees to recognize lease assets and lease liabilities on the balance sheet and to expand disclosures about leasing arrangements, both qualitative and quantitative. In terms of transition, the guidance requires adoption based upon a modified retrospective approach. This guidance was effective for public business entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption was permitted. We adopted this guidance as of January 1, 2019. Please refer to Note 7, Commitments and Contingencies, for additional information.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, to address how certain cash receipts and cash payments are presented and classified in the statement of cash flows in an effort to reduce existing diversity in practice. The standard includes eight specific cash flow issues and provides guidance on the appropriate cash flow presentation for each. The new standard was effective for the Company on January 1, 2019 using a retrospective transition method. The adoption of this standard did not have a material impact on the Company's financial position or results of operations for the years ended December 31, 2019 and 2020.

In August 2018, the FASB issued ASU No. 2018-13, *Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. The new standard modifies the disclosure requirements on fair value measurements in Topic 820, including removals of existing disclosures, modifications of existing disclosures, and additions of new disclosures. Certain amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair values measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted for any removed or modified disclosure. The new standard was effective for the Company on January 1, 2020, and did not have a material impact on its financial disclosures.

3. Fair Value Measurements

The following tables present the financial instruments carried at fair value on a recurring basis as of December 31, 2019 and 2020, respectively, in accordance with the FASB ASC 820 hierarchy (in thousands):

	Fair Value Measurements at December 31, 2019			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents	$18,637	$ —	$ —	$18,637

	Fair Value Measurements at December 31, 2020			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents	$ 6,996	$ —	$ —	$ 6,996

The Company's cash equivalents represent deposits in a short-term United States Treasury money market fund quoted in an active market and classified as a Level 1 asset. There were no assets or liabilities measured at fair value on a nonrecurring basis at December 31, 2019 and 2020. There were no transfers between Level 1 and Level 2 of the fair value hierarchy during the years ended December 31, 2019 and 2020.

4. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	December 31,	
	2019	2020
Insurance	$ 11	$ 8
Other	—	15
Total Prepaid expenses and other current assets	$ 11	$ 23

5. Property and Equipment, Net

Property and equipment, net, consisted of the following (in thousands):

	December 31,	
	2019	2020
Laboratory equipment	$ 62	$ 1,264
Leasehold improvements	—	213
Furniture and office equipment	—	95
	62	1,572
Less: accumulated depreciation and amortization	—	(469)
Total Property and equipment, net	$ 62	$ 1,103

Depreciation and amortization expense for the years ended December 31, 2019 and 2020 was $0.0 million and $0.5 million, respectively.

6. Accrued Expenses and Other Current Liabilities

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2019	2020
Employee compensation and benefits	$107	$ 1,002
External research and development expenses	8	712
Professional fees	—	167
Accrued taxes	109	64
Other	9	52
Total Accrued expenses and other current liabilities	$233	$ 1,997

7. Commitments and Contingencies

Operating Leases

On January 1, 2019, of the Company adopted ASC 842. As Company had not entered into any leases as of January 1, 2019, the adoption of ASC 842 had no impact on the consolidated balance sheet. As of December 31, 2019 and 2020, the Company had three operating leases, where the Company is the lessee or sublessee, for office and laboratory space. Lease terms are through 2022. The Company had no finance leases as of December 31, 2019 and 2020.

The components of lease expense were as follows (in thousands):

	Year Ended December 31,	
	2019	2020
Lease cost		
Operating lease cost	$ 4	$ 497
Short-term lease cost	128	146
Variable lease cost(1)	—	70
Total lease cost	$ 132	$ 713
Other information		
Operating lease right-of-use obtained in exchange for new operating lease liabilities	$ 18	$ 1,186
Cash paid for amounts included in the measurement of lease liabilities, included in operating cash flows	$ 3	$ 484
Weighted-average remaining lease term	1.58	1.25
Weighted-average discount rate	7.00%	9.98%

(1) Variable lease cost includes common area maintenance charges

Maturities of lease liabilities as of December 31, 2020 were as follows (in thousands):

Year Ending December 31,	
2021	663
2022	168
Total lease payments	831
Less: amount representing imputed interest	(51)
Total future minimum lease obligations	$780

Legal Proceedings

The Company is not currently subject to any material legal proceedings.

Guarantees and Indemnifications

The Company's certificate of incorporation requires the Company to indemnify and advance expenses to its officers and directors and agents to the fullest extent permitted by law. Under the Company's operating leases, the Company is required to indemnify the lessor against claims, actions, or damages incurred in connection with, among other items, the Company's occupancy and use of the premises.

The Company's equity agreements and certain other arrangements include standard indemnifications against claims, actions, or other matters that may arise in connection with these arrangements.

As of December 31, 2019, and 2020, the Company had not experienced any losses related to these indemnification obligations, and no claims with respect thereto were outstanding. The Company does not expect significant claims related to these indemnification obligations and has no amount accrued related to these contingencies.

8. Licensing Agreements

The University of Chicago Agreement

In April 2020, the Company entered into a license agreement (the "University License Agreement") with the University of Chicago (the "University") to obtain an exclusive license under certain patents resulting from

research performed, in-part, by the Company's scientific founder, as well as a non-exclusive license to certain know-how and materials relating thereto. Under the terms of the license, the Company has the global right to develop and commercialize products that are covered by a valid claim of a licensed patent, incorporate or use the licensed know-how and materials or are known to assess, modulate or utilize the activity of certain specified biological targets. The Company determined that substantially all of the fair value of the University License Agreement was attributable to in-process research and development and no substantive processes were acquired that would constitute a business. The Company concluded that it did not have any alternative future use for the acquired in-process research and development associated with the agreement and that it will record payments made under the agreement as research and development expenses in the consolidated statements of operations.

In partial consideration for the license from the University, the Company issued to the University 311,076 shares of its Common Stock in 2020. The Company recorded the value of the shares issued of $3 thousand as research and development expenses in the year ended December 31, 2020. Pursuant to the University License Agreement, the Company is obligated to pay to the University an annual maintenance fee of $10,000 commencing on the third anniversary of the effective date, potential development and commercial milestones of up to $7.7 million as well as running royalties on net sales of licensed products at varying rates ranging from less than a percent to the low single digits, subject to a minimum annual royalty of up to $3.0 million during certain years following the effective date. The Company's royalty obligations apply on a licensed product-by-licensed product and country-by-country basis until: (1) for licensed products covered by a valid claim of a licensed patent in a given country, the expiration of such valid claims; and (2) for all other licensed products, ten (10) years from the first commercial sale of a licensed product in a given country. The Company is also obligated to pay the University a percentage of certain sublicensing revenue ranging from low- to mid-teens based on the date of entering into the applicable sublicense. The Company assessed the milestone and royalty events at December 31, 2020 and concluded that no such payments were required.

Pfizer, Inc. Agreement

In December 2020, the Company entered into a license agreement (as amended, the "Pfizer License Agreement") with Pfizer, Inc. ("Pfizer") for worldwide development and commercialization rights to antibody drug conjugate (ADC) product candidates directed to certain licensed targets, including PYX-201 and PYX-203, and products containing the ADC product candidates. The Pfizer License Agreement became effective for the Company in March 2021. The Company's rights are exclusive with respect to certain patents owned or controlled by Pfizer covering the licensed ADCs. Pfizer has also granted the Company a non-exclusive license to use Pfizer's ADC technology platform to develop and commercialize the licensed ADCs and licensed products. The initial licensed targets include CD123 and extra domain B (EBD of fibronectin) and the Company has the option to expand the scope of its license to add additional licensed targets that have not been licensed to a third party or are not the subject of a Pfizer ADC development program. In March 2021, the Company entered into an amendment to the Pfizer License Agreement to include additional know-how within the scope of its license. The Company determined that substantially all of the fair value of the Pfizer License Agreement was attributable to in-process research and development and no substantive processes were acquired that would constitute a business. The Company concluded that it did not have any alternative future use for the acquired in-process research and development associated with the agreements and that it will record payments made under the License Agreement as research and development expenses in the consolidated statements of operations.

Pursuant to the Pfizer License Agreement, the Company paid a combined $25.0 million, consisting of an upfront fee equal to a cash payment of $5.0 million and the issuance of 12,152,145 shares of Series B Convertible Preferred Stock with a value of $20.0 million in 2021 to Pfizer, and is obligated to pay future contingent payments and royalties, including up to an aggregate of $660 million in milestones for the first four licensed ADCs. Additional ADC targets may be licensed for a nominal upfront and milestones. Additionally, if products are launched, the Company will pay Pfizer tiered royalties on net sales of licensed products in varying royalty rates ranging from low single digits to mid-teens. As the effective date of the Pfizer License Agreement was in March 2021 and as the Company did not incur any obligations under the contract as of December 31, 2020, there were no

amounts recorded in research and development expenses for the year ended December 31, 2020. The Company's royalty obligations apply on a licensed product-by-licensed product and country-by-country basis from first commercial sale until the latest to occur of: (1) 12 years from first commercial sale; (2) the expiration of all regulatory or data exclusivity; and (3) the expiration of the last valid claim of a licensed patent covering the licensed product in a country. The Company is also obligated to pay Pfizer a percentage of certain sublicensing revenue ranging from thirty percent to low-double digits based on the stage of development of the licensed product at the time of entering into the applicable sublicense. If the Company effects a change of control transaction or sells all or substantially all of its assets relating to the Pfizer License Agreement within a certain time period, the Company will make a one-time payment to Pfizer of up to $20.0 million.

LegoChem Biosciences, Inc. Agreements

In December 2020, the Company entered into a license agreement (the "LegoChem License Agreement") with LegoChem Biosciences, Inc. ("LegoChem") pursuant to which the Company licensed worldwide (other than Korea) development and commercialization rights for LCB67, an ADC product candidate targeting DLK-1, and products containing the licensed compound. The Company has the right to request that LegoChem use commercially reasonable efforts at the Company's cost to modify the licensed compound if there are certain technical failures of the licensed compound that the Company believes are attributable to the linker or the payload used in the licensed compound, and the modified compound will replace the unmodified version as the licensed compound. In February 2021, the Company entered into an amendment to the LegoChem License Agreement to include additional patents within the scope of its license. The Company determined that substantially all of the fair value of the LegoChem License Agreement was attributable to in-process research and development and no substantive processes were acquired that would constitute a business. The Company concluded that it did not have any alternative future use for the acquired in-process research and development associated with the agreements and that it will record payments made under the LegoChem License Agreement as research and development expenses in the consolidated statements of operations.

Pursuant to the LegoChem License Agreement, the Company paid $0.5 million in 2020 and $9.0 million in 2021 and is required to purchase certain initial quantities of licensed product from LegoChem for an estimated cost of $7.0 million. The Company recorded the $0.5 million upfront payment as research and development expenses during the year ended December 31, 2020. As there were no legal obligations related to the $9.0 million payment or the manufacturing of the initial quantities of licensed product as of December 31, 2020, and as the Company has the ability to cancel the LegoChem License Agreement as of December 31, 2020 to avoid future payments under the arrangement, the Company did not record research and development expenses for such amounts during the year ended December 31, 2020. The Company is also obligated to pay up to $284.5 million to LegoChem if certain development, regulatory and sales milestones are achieved, as well as tiered royalties on net sales of licensed products ranging from mid-single digit to high-single digit royalty rates. The Company's royalty obligations apply on a licensed product-by-licensed product and country-by-country basis until the latest to occur of: (1) the date of expiration of the last valid claim of a licensed patent covering the licensed product; (2) 10 years from first commercial sale; and (3) the expiration of regulatory or data exclusivity. The Company assessed the milestones and royalties under the LegoChem License Agreement as of December 31, 2020 and determined no amounts should be recorded as research and development expenses during the year ended December 31, 2020.

Under the LegoChem License Agreement, the Company is obligated to use commercially reasonable efforts to develop at least one licensed product for at least one indication and, upon receipt of regulatory approval in the United States, China, Japan or any three or more of the major European countries (United Kingdom, Spain, France or Germany), to commercialize at least one licensed product for at least one indication in such countries. The Company has agreed to purchase certain initial quantities of licensed product from LegoChem and has the right to manufacture the licensed products, provided that LegoChem has the right to control the manufacture and use of the conjugation methods and materials, linker and payload elements included in the licensed intellectual property. The Company controls prosecution, enforcement and defense of the licensed patents that are specific to the licensed products, and LegoChem has backup rights if the Company elects not to exercise its rights.

The LegoChem License Agreement will remain in effect on a country-by-country basis until the expiration of the obligation to pay royalties, unless terminated in accordance with the following: (1) by either party for the other party's material breach if such party fails to cure such breach within the specified cure period; (2) by either party upon cessation of business activities or certain insolvency events of the other party; (3) by the Company if there are certain technical failures of the licensed compound; or (4) by the Company for any reason, upon 90 days' prior written notice. If the Company challenges the scope, ownership, validity or enforceability of a licensed patent, LegoChem may convert the Company's exclusive license to a non-exclusive license or terminate the LegoChem License Agreement.

In December 2020, the Company also entered into an opt-in, investment and additional consideration agreement with LegoChem (the "Opt-In Agreement"). The Company recorded a $0.5 million in accrued expenses on the consolidated balance sheet at December 31, 2020 and related research and development expense for such license fee in December 2020. The Company settled the outstanding liability of $0.5 million through the issuance of shares Series B Convertible Preferred Stock as part of its Series B financing in March 2021. The Company is also obligated to pay LegoChem a percentage of certain sublicensing revenue ranging from thirty percent to low-double digits based on the stage of development of the licensed product at the time of entering into the applicable sublicense, which percentage may be increased to up to fifty percent for any upfront payment from a sublicensee under certain circumstances. LegoChem exercised its option in December 2020 under the Opt-In Agreement to make a $8.0 million payment to the Company, which was made in April 2021, in exchange for the right to receive an extra milestone payment of $9.6 million upon the earliest to occur of the certain events, including the date of pricing or offer of the first public offering of its common stock or if the Company is the subject of a change of control transaction. LegoChem may elect to receive payment for up to 50% of this extra milestone payment as well as certain development milestone payments under the LegoChem License Agreement in shares of the Company's preferred stock. The Company determined the extra milestone payment was a derivative under ASC 815 for which there was a binding contract and firm commitment for in March 2021. The Company assessed the milestones and royalties under the Opt-In Agreement as of December 31, 2020 and determined no amounts should be recorded as research and development expenses during the year ended December 31, 2020.

9. Convertible Preferred Stock

Convertible preferred stock consisted of the following as of December 31, 2019 and 2020 (in thousands, except share and per share amounts):

	Authorized Shares	Shares Issued and Outstanding	Liquidation Value	Carrying Value	Common Stock Issuable Upon Conversion
Series A	22,724,926	22,724,925	$ 22,000	$ 21,942	22,724,925

Series A Convertible Preferred Stock

In June 2019, the Company entered into a securities purchase agreement (as amended, "Series A Agreement") with certain investors to sell shares of Series A convertible preferred stock ("Series A") at $0.9681 per share. In June and July 2019, the Company issued 22,724,926 shares of Series A to institutional investors at $0.9681 per share for gross cash proceeds of $22.0 million, less issuance costs of $0.1 million, resulting in net proceeds of $21.9 million.

Rights, Preferences, Privileges and Restrictions

Voting—Each preferred stockholder is 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 at the time of such vote**.** All preferred stockholders are entitled to vote on all matters upon which holders of common stock have the right to vote, other than matters that must by law be voted by class or series vote.

Dividends—The holders of preferred stock are entitled to receive dividends, when and if declared by the board of directors of the Company, prior and in preference to any dividend on the common stock of the Company, in an amount equal to $0.9681 per share of Series A per annum, subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization. The dividends are non-cumulative, and no such dividends have been declared to date. After payment of dividends on the Series A, any additional dividends shall be distributed among all holders of common stock and preferred stock based on the number of shares of common stock that would be held by each such holder if all shares of preferred stock were converted to common stock.

Liquidation Preference—In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company, or a deemed liquidation event of the Company (which includes certain mergers, acquisitions and asset transfers), the holders of preferred stock shall be entitled to receive on a *pari passu* basis, out of the assets or consideration available for distribution in connection with such event and before any payment will be made to the holders of common stock, an amount per share equal to the original issuance price of the preferred stock ($0.9681 per share for the Series A), plus any declared but unpaid dividends on such shares. The treatment of an event as a deemed liquidation event may be waived by the vote or written consent of the holders of at least 66% of the Series A (the “Requisite Preferred Holders”).

If the assets or consideration available for distribution to the stockholders are insufficient to pay the Series A liquidation amounts in full, then the holders of Series A shall share ratably in any distribution of the assets in proportion to the respective amounts which would otherwise be payable in respect of the shares of Series A held by them upon distribution if all amounts payable were paid in full.

After payment of the Series A liquidation amounts in full, all of the remaining assets of the Company available for distribution to the stockholders shall be distributed among the holders of the preferred stock and common stock, pro rata based on the number of shares held by each such holder on an as converted to common stock basis.

Conversion—Shares of preferred stock are convertible into common stock at the option of the holder at any time and without payment of any additional consideration. Each share of Series A is convertible into a number of fully paid shares of common stock as is determined by dividing the Series A original issuance price ($0.9681) by the Series A conversion price (initially equal to $0.9681). Further, the conversion rates of preferred stock are subject to adjustment based upon the occurrence of certain future events as defined in the Company’s certificate of incorporation.

Shares of preferred stock are automatically converted into shares of common stock at the earlier of (i) the closing of a firm-commitment underwritten public offering resulting in at least $50 million of gross proceeds in the aggregate to the Company, prior to deductions for underwriting discounts, commission and expenses or (ii) the date and time, or occurrence of an event, specified by a vote of the Series A Stockholders

10. Common Stock

The Company is authorized to issue up to 40,300,000 shares of common stock, of which 10,450,000 and 13,849,687 shares were issued at December 31, 2019 and 2020, respectively, and 5,267,544 and 8,198,998 shares were outstanding at December 31, 2019 and 2020.

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.

Voting—Each holder of outstanding shares of common stock shall be entitled to one vote in respect of each share. The holders of outstanding shares of common stock, voting together as a single class, shall be entitled to elect one director. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of a majority of the outstanding shares of common stock and preferred stock voting together as a single class.

Dividends—Subject to the payment in full of all preferential dividends to which the holders of the preferred stock are entitled, the holders of common stock shall be entitled to receive dividends out of funds legally available therefor at such times and in such amounts as the board of directors may determine in its sole discretion, with holders of preferred stock and common stock sharing *pari passu* in such dividends.

Liquidation Rights—After payment in full of all preferential amounts to which the holders of preferred stock are entitled upon any voluntary or involuntary liquidation, dissolution or winding-up of the Company or deemed liquidation event of the Company, all of the remaining assets of the Company available for distribution to the stockholders shall be distributed among the holders of the preferred stock and common stock, pro rata based on the number of shares held by each such holder on an as converted to common stock basis.

Reserved Shares—As of December 31, 2020, the Company reserved the following shares of common stock for issuance upon conversion of the outstanding convertible preferred stock and exercise of stock options:

Series A convertible preferred stock	22,724,925
Unvested restricted stock options	5,650,689
Stock options available for issuance	226,290
Stock options outstanding	1,401,519
Total	30,003,423

11. Stock-Based Compensation

In 2019, the Company established the 2019 Plan, under which the Company may grant options and restricted stock to its employees and certain non-employees. The maximum number of shares of common stock reserved for issuance under the 2019 Plan is 4,777,358 shares. There were 226,290 shares of common stock remaining and available for issuance under the 2019 Plan at December 31, 2020.

The Company may grant options to purchase authorized but unissued shares of the Company's common stock. Options granted under the 2019 Plan include incentive stock options that can be granted only to the Company's employees and non-statutory stock options that can be granted to the Company's employees, consultants, advisors and directors. The 2019 Plan also permits the Company to issue restricted stock awards.

The exercise prices, vesting and other restrictions of the awards to be granted under the 2019 Plan are determined by the board of directors, except that no stock option may be issued with an exercise price less than the fair market value of the common stock at the date of the grant or have a term in excess of ten years. Options granted under the 2019 Plan are exercisable in whole or in part at any time subsequent to vesting.

Stock Options

The following table provides the assumptions used in determining the fair value of option awards for the years ended December 31, 2019 and 2020:

	2019	2020
Expected volatility	86.8%	82.8% – 87.4%
Risk-free interest rate	1.73%	0.38% – 0.56%
Expected dividend yield	0%	0%
Expected term (in years)	5.43 – 6.08	5.57 – 6.08

The weighted average grant-date fair value of the options granted was $0.01 and $0.09 per share for the years ended December 31, 2019 and 2020, respectively.

The following table summarizes stock option activity for the year ended December 31, 2020 (in thousands, except share and per share amounts):

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2020	3,006,750	$ 0.01	9.94	$ —
Granted	1,654,117	$ 0.09		
Exercised	(3,149,549)	$ 0.01		
Forfeited	(109,799)	$ 0.01		
Outstanding at December 31, 2020	1,401,519	$ 0.10	9.38	$ 348
Options exercisable at December 31, 2020	336,732	$ 0.02	9.02	$ 112

The Company has recorded stock-based compensation expense related to stock options of $2 thousand and $18 thousand for the years ended December 31, 2019 and 2020, respectively. The Company has an aggregate $0.1 million of gross unrecognized stock-based compensation expense as of December 31, 2020 remaining to be amortized over a weighted average period of 1.8 years.

Stock-based compensation expense related to stock options recorded in the accompanying statements of operations is as follows (in thousands):

	Year Ended December 31,	
	2019	2020
Research and development	$ —	$ 10
General and administrative	2	8
Total	$ 2	$ 18

The Company has not recognized and does not expect to recognize in the near future, any tax benefit related to employee stock-based compensation expense as a result of the full valuation allowance related to its net deferred tax assets.

Restricted Stock Awards

The Company issued 6,325,000 shares of restricted common stock to the employee co-founders and certain non-employee consultants in 2019. The shares of restricted common stock were issued pursuant to standalone restricted stock purchase agreements that are independent of the 2019 Plan. The shares of restricted common stock carried a purchase price equivalent of $0.002 per share. The compensation cost was measured based on the fair value of the underlying common stock less the purchase price of the restricted common stock and the Company recognizes depreciation costs over the requisite service period.

Under the terms of the restricted stock purchase agreements, the Company has a repurchase option whereby it has the right to repurchase any unvested shares upon termination at a price per share equal to the lesser of: (i) the fair market value of the Company's common stock on the date of repurchase and (ii) the original purchase price. The shares of restricted common stock issued to the Company's co-founders and non-employee consultants vest based on a predefined number of shares.

The Company recognized an associated deposit liability for restricted stock awards issued pursuant to standalone restricted stock purchase agreements upon issuance based on the purchase price of the awards as the unvested shares are subject to repurchase upon termination. As the awards of restricted stock vest, the Company reclassifies the deposit liability to additional paid-in capital.

The following table summarizes restricted stock activity for the year ended December 31, 2020:

	Restricted Stock Number of Shares
Non-vested, January 1, 2020	5,182,455
Issued	3,148,641
Vested	(2,619,469)
Cancelled	(60,938)
Non-vested, December 31, 2020	5,650,689

The Company has recorded stock-based compensation expense related to the restricted stock of $26 thousand for the year ended December 31, 2019 and 2020.

12. Income Taxes

During the years ended December 31, 2019 and 2020, the Company recorded no current or deferred income tax expenses or benefits as the Company has incurred losses since inception and has provided a full valuation allowance against its deferred tax assets.

A reconciliation of the expected income tax benefit computed using the federal statutory income tax rate to the Company's effective income tax rate is as follows for the years ended December 31, 2019 and 2020:

	Year Ended December 31,	
	2019	2020
Income tax computed at federal statutory rate	21.00%	21.00%
State taxes, net of federal benefit	6.00	5.60
Change in valuation allowance	(27.70)	(27.90)
Research and development credit carryovers	—	1.50
Permanent differences	(0.40)	(0.20)
Prior year adjustment	1.1	—
Effective income tax rate	0.00%	0.00%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's net deferred tax assets as of December 31, 2019 and 2020 are as follows:

	Year Ended December 31,	
	2019	2020
Deferred tax assets:		
Net operating losses	$ 685	$ 3,515
Reserves and accruals	33	257
Capitalized legal IP fees	15	47
License fees	—	252
Lease liability	4	218
Tax credit carryforwards	—	187
Depreciation	—	50
Other	34	31
Total gross deferred tax asset	771	4,557
Valuation allowance	(767)	(4,343)
Net deferred tax asset	4	214
Deferred tax liabilities:		

Deferred tax assets are reduced by a valuation allowance if, based on the weight of available positive and negative evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. For the years ended December 31, 2019 and 2020, the valuation allowance for deferred tax assets increased by $3.6 million and $0.8 million, respectively. This increase mainly relates to the establishment of valuation allowance against additional net operating loss and research credit carryovers generated in the current year.

As of December 31, 2020, the Company had $13.2 million and $12.5 million of federal and state operating loss carryforwards, respectively. The federal net operating loss carryforward is not subject to expiration. The state net operating losses begin to expire in 2039. In addition, as of December 31, 2020, the Company had $0.1 million and $0.1 million of federal and state credit carryovers which begin to expire in 2039. These loss and credit carryforwards are subject to review and possible adjustment by the appropriate taxing authorities.

Utilization of the Company's net operating loss ("NOL") carryforwards and research and development ("R&D") credit carryforwards may be subject to a substantial annual limitation due to ownership change limitations that have occurred previously or that could occur in the future in accordance with Section 382 of the Internal Revenue Code of 1986 ("Section 382") as well as similar state provisions. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be utilized annually to offset future taxable income and taxes, respectively. In general, an ownership change as defined by Section 382 results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50% over a three-year period. Since its formation, the Company has raised capital through the issuance of capital stock on several occasions. These financings could result in a change of control as defined by Section 382. The Company has not yet completed a detailed study of its inception to date ownership change activity.

The Company follows the provisions of ASC 740-10, "*Accounting for Uncertainty in Income Taxes*," which specifies how tax benefits for uncertain tax positions are to be recognized, measured, and recorded in consolidated financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim period guidance, among other provisions. As of December 31, 2019 and 2020, the Company has not recorded any

amounts for uncertain tax positions. The Company's policy is to recognize interest and penalties accrued on any uncertain tax positions as a component of income tax expense, if any, in its statements of income. For the years ended December 31, 2019 and 2020, no estimated interest or penalties were recognized on uncertain tax positions. The Company has not yet conducted a study of its research and development credit carry forwards. Such a study may result in an adjustment to the Company's research and development credit carryforwards; however, until a study is completed and any adjustment is known, no amount is being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's research and development credits, and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheet or statement of operations and comprehensive loss if an adjustment were required.

The Company has never been examined by the Internal Revenue Services or any other jurisdiction for any tax years and, as such, all years within the applicable statutes are potentially subject to audit.

13. Net Loss per Share

Net Loss per Share

Basic and diluted net loss per share was calculated as follows (in thousands, except share and per share amounts):

	Year Ended December 31,	
	2019	**2020**
Numerator:		
Net loss	$ (2,772)	$ (12,828)
Denominator:		
Weighted-average common shares outstanding, basic and diluted	4,271,897	6,553,346
Net loss per share, basic and diluted	$ (0.65)	$ (1.96)

The Company's potentially dilutive securities, which include convertible preferred stock, restricted stock, and stock options, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same.

The Company excluded the following from the computation of diluted net loss per share attributable to common stockholders at December 31, 2019 and 2020 because including them would have had an anti-dilutive effect:

	Year Ended December 31,	
	2019	**2020**
Convertible Preferred Stock	22,724,925	22,724,925
Unvested Restricted Stock	5,182,455	5,650,689
Stock options outstanding	3,006,750	1,401,519
Stock options available for issuance	1,770,608	226,290
Total	32,684,738	30,003,423

14. Related Parties

In 2019, the company appointed a Director to its Board, who is also an employee of a significant investor in the Company's 2019 Series A financing.

In 2019 and 2020, the Company's former Chief Executive Officer ("CEO"), former President, and current Vice President, Business Development, were also employees of a significant investor in the Company. In 2019, the former CEO and President were paid by the Company approximately $0.4 million and $0.2 million, respectively, for compensation. In 2020, the former CEO was paid less than $0.1 million for compensation and bonus. In 2020, the current Vice President, Business Development, was paid by the Company less than $0.1 million, respectively, for compensation.

In 2019 and 2020, the Company entered into agreements with several Scientific Advisory Board ("SAB") members and paid them monthly amounts, ranging from $2,500 to $5,000 per month. No board member was paid more than $0.1 million individually in either 2019 or 2020 and, in the aggregate, all board members were paid less than $0.3 million for both years combined.

In 2020, the Company entered into an agreement with an outside consultant to become its interim Chief Financial Officer ('CFO"). The Company paid the interim CFO approximately $0.2 million for services rendered for the year ended December 31, 2020 and accrued, as of December 31, 2020, approximately $0.1 million for a bonus earned in 2020, but not paid until 2021.

In 2020, the Company entered into the University License Agreement, as well as a sponsored research agreement, with the University of Chicago, which had previously purchased 309,885 shares of the Company's Series A Preferred Stock as part of the Company's 2019 Series A Financing. In partial consideration for the license from the University, the Company issued to the University 311,076 shares of its Common Stock in 2020. In addition, in 2019 and 2020, the Company incurred costs of less than $0.1 million and less than $0.3 million, respectively, related to the license agreement, the sponsored research agreement, and other professional services involving the University of Chicago. See Note 8 for additional information.

In 2020, the Company entered into the Pfizer License Agreement with Pfizer. Pursuant to the Pfizer License Agreement, the Company paid a combined $25.0 million, consisting of an upfront fee of $5.0 million and issued 12,152,145 shares of Series B Preferred Stock in 2021 to Pfizer. See Note 8 for additional information. In addition, Pfizer Ventures purchased 6,076,072 shares of the Company's Series B Financing in 2021.

In 2020, the Company entered into the LegoChem License Agreement and the Opt-In Agreement with LegoChem. Pursuant to the LegoChem License Agreement, the Company paid $0.5 million in 2020 and $9.0 million in 2021 to LegoChem. In addition, as part of the Opt-In Agreement, the Company recorded $0.5 million in accrued expenses on the consolidated balance sheet at December 31, 2020. The Company settled the outstanding liability of $0.5 million through the issuance of 303,804 shares of Series B Preferred Stock as part of its Series B financing to LegoChem in March 2021. See Note 8 for additional information.

15. Subsequent Events

Issuance of Series B Convertible Preferred Stock

On March 5, 2021, the Company completed a convertible preferred stock financing at a price of $1.6458 per share for gross proceeds of $152.0 million, with $0.4 million of issuance costs and 92,356,299 shares was funded, with participation from additional new investors and existing investors. The Company will use the proceeds to advance its differentiated portfolio of ADCs, a growing class of therapies that deliver highly potent targeted treatments directly to cancer cells, including PYX-201 and PYX-203.

Joint Venture Agreement

In March 2021, the Company entered into definitive transaction agreements with Alloy Therapeutics, Inc. ("Alloy") and the Alloy Pyxis JV to finance and operate a joint venture company, which we refer to as the Alloy Pyxis JV, formed in collaboration with Alloy to leverage the Company's technology and Alloy's ATX-Gx™ platform and antibody discovery services.

The Alloy Pyxis JV granted to the Company and Alloy 50% of the voting membership units of the Alloy Pyxis JV in exchange for certain initial contributions. The Company's initial contribution included $50,000 and a non-exclusive fully paid-up license to certain intellectual property owned or controlled by the Company to enable the collaboration with the Alloy Pyxis JV. Alloy's initial contribution included $50,000 and the execution of the Alloy license agreement and the Alloy services agreement to enable the collaboration with the Alloy Pyxis JV. The Alloy Pyxis JV is governed by a board of directors consisting of an equal number of our representatives and Alloy's representatives. The protective provisions under the operating agreement of the Alloy Pyxis JV require the approval of both the Company and Alloy before the Alloy Pyxis JV may take certain actions.

In connection with the formation of the Alloy Pyxis JV, the Company entered into a three-year research collaboration with Alloy and the Alloy Pyxis JV to identify and select certain biological targets and create development candidate antibodies directed to those targets for further pre-clinical development, clinical development and commercialization. Under the collaboration agreement, the parties will conduct research under a mutually agreed research plan and budget for up to six research programs focused on mutually selected targets. The Company and Alloy will provide research support for the collaboration through separate services agreements with the Alloy Pyxis JV, which services will be paid in the form of promissory notes issued by the Alloy Pyxis JV. The Alloy Pyxis JV will own all intellectual property arising from the collaboration, subject to certain exceptions for intellectual property relating to Alloy's ATX-Gx platform.

If a development candidate antibody under a research program meets certain mutually agreed selection criteria, the Company will have the exclusive option to obtain an exclusive license from the Alloy Pyxis JV to further develop and commercialize all of the development candidate antibodies developed under that research program. The Company may in-license one research program on certain favorable pre-agreed financial terms. For all other in-licensed research programs, the Company will be obligated to pay fair market value as determined by a third-party valuation. Any research program that the Company does not in-license may be licensed by the Alloy Pyxis JV to a third party.

Shares

Common Stock

Prospectus

BofA Securities
Jefferies
Credit Suisse
William Blair
LifeSci Capital

, 2021

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all expenses to be paid by the registrant, other than estimated underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the Securities and Exchange Commission registration fee, the FINRA filing fee and the exchange listing fee.

	Amount to be Paid
Securities and Exchange Commission registration fee	$ 10,910
FINRA filing fee	15,500
Nasdaq listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous	*
Total	$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers

Pyxis Oncology, Inc. is incorporated under the laws of the State of Delaware. Reference is made to Section 102(b)(7) of the General Corporation Law of the State of Delaware, as amended (the "DGCL"), which enables a corporation in its original certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchase or redemptions or (4) for any transaction from which the director derived an improper personal benefit.

Section 145(a) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or

settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

We expect that the amended and restated certificate of incorporation adopted by us prior to the completion of this offering will provide that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases or other distributions pursuant to Section 174 of the DGCL, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our charter will provide that if the DGCL is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

We also expect our charter will further provide that any amendment, repeal or modification of such article unless otherwise required by law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or amendment of a director serving at the time of such repeal or modification.

We expect that our amended and restated certificate of incorporation adopted by us prior to the completion of this offering, will provide that we shall indemnify each of our directors and executive officers, and shall have power to indemnify our other officers, employees and agents, to the fullest extent permitted by the DGCL as the same may be amended (except that in the case of an amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the DGCL permitted us to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. We expect the amended and restated certificate of incorporation will further provide for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees, in advance of the final disposition of such action, suit or proceeding only upon receipt of an undertaking by such person to repay all amounts advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such person is not entitled to be indemnified for such expenses.

In addition, we expect the amended and restated certificate of incorporation will provide that the right of each of our directors and officers to indemnification and advancement of expenses shall not be exclusive of any

other right now possessed or hereafter acquired under any statute, provision of the charter or bylaws, agreement, vote of stockholders or otherwise. Furthermore, our amended and restated certificate of incorporation will authorize us to provide insurance for our directors, officers, employees and agents against any liability, whether or not we would have the power to indemnify such person against such liability under the DGCL or the bylaws.

We have entered into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and our amended and restated certificate of incorporation.

We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we will enter into in connection with the sale of the common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

In the three years preceding the filing of this registration statement, the registrant has sold and issued the following unregistered securities:

(a) Issuance of Common Stock

(1) In May 2020, we issued a total of 311,076 shares of common shares at a per share price of $0.01 to the University of Chicago in consideration for the exclusive license under the University License Agreement.

(b) Issuance of Preferred Stock

(1) In June 2019, we issued a total of 22,724,925 shares of Series A convertible preferred stock to 9 accredited investors at a purchase price of $0.9681 per share, for aggregate proceeds of approximately $21.9 million in cash, net of issuance costs.

(2) In March 2021, we issued a total of 92,356,299 shares of our Series B convertible preferred stock to 36 accredited investors at a purchase price of $1.6458 per share, for aggregate proceeds of approximately $151.6 million in cash, net of issuance costs.

(3) In March 2021, we issued a total of 12,455,949 shares of our Series B convertible preferred stock to LegoChem and Pfizer at a purchase price of $1.6458 per share. LegoChem was issued 303,804 shares as part of the $0.5 million research and development expenses under the Opt-In Agreement and Pfizer was issued 12,152,145 as part of the remaining $20.0 million license expenses under the Pfizer License Agreement.

(c) Restricted Common Stock and Stock Option Grants and Exercises

Between August 15, 2018 and September 15, 2021, we granted restricted common stock and stock options (net of forfeiture) to purchase an aggregate of 35,501,267 shares of common stock, with exercise prices ranging from $0.002 to $1.37 per share, to our employees, directors, advisors and consultants. Between August 15, 2018 and September 15, 2021, we issued 13,592,496 shares of our common stock upon the exercise of the restricted common stock and stock options for an aggregate consideration of less than $0.1 million in cash.

The issuances described under (a) and (b) above were exempt from registration under the Securities Act (or Regulation D promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act as transactions by an issuer not involving a public offering. The recipients of the securities in each of these transactions represented

their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

The restricted common stock and options described under (c) above were exempt from registration under the Securities Act under either (1) Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701 or (2) Section 4(a)(2) of the Securities Act as transactions by an issuer not involving any public offering. The recipients of such securities were the registrant's employees, consultants or directors and received the securities under the registrant's equity compensation plans. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

See the Exhibit Index immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

Schedules not listed have been omitted because the information required to be set forth therein is not applicable, not material or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, (the "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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 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 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 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.

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement
3.1*	Form of Amended and Restated Certificate of Incorporation of Pyxis Oncology, Inc., to be in effect on the completion of the offering
3.2*	Form of Amended and Restated Bylaws of Pyxis Oncology, Inc., to be in effect on the completion of the offering
4.1*	Form of Common Stock Certificate
5.1*	Opinion of Sidley Austin LLP
10.1*	Amended and Restated Investor Rights Agreement
10.2+*	Form of Indemnification Agreement
10.3+*	Form of Employment Agreement
10.4+*	Pyxis Oncology, Inc. 2019 Equity Incentive Plan and related form agreements
10.5+*	Pyxis Oncology, Inc. 2021 Equity Incentive Plan and related form agreements
10.6+*	Pyxis Oncology, Inc. Employee Stock Purchase Plan
10.7†	License Agreement by and between Pyxis Oncology, Inc. and Pfizer Inc.
10.8†	Amendment No. 1 to License Agreement by and between Pyxis Oncology, Inc. and Pfizer Inc.
10.9†	Exclusive License Agreement between the University of Chicago and Pyxis Oncology for Cancer Immunotherapy Technology
10.10†	Licensed Agreement between Pyxis Oncology, Inc. and LegoChem Biosciences Inc.
10.11†	First Amendment to License Agreement between Pyxis Oncology, Inc. and LegoChem Biosciences Inc.
10.12†	Opt-In, Investment and Additional Consideration Agreement between Pyxis Oncology, Inc. and LegoChem Biosciences, Inc.
10.13†*	Collaboration Agreement by and among Pyxis Oncology, Inc., Alloy Therapeutics, Inc. and the Alloy Pyxis JV.
23.1*	Consent of Sidley Austin LLP (included in Exhibit 5.1)
23.2	Consent of Ernst and Young LLP, independent registered public accounting firm
24.1	Power of Attorney (included on the signature page to this Registration Statement)

* To be filed by amendment.
\+ Indicates management contract or compensatory plan.
† Certain confidential information contained in this exhibit, marked by [***], has been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Cambridge, Massachusetts, on the 17th day of September, 2021.

Pyxis Oncology, Inc.

By: /s/ Lara Sullivan
Lara Sullivan, M.D.
Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Lara Sullivan, M.D. and Pamela Connealy and each of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462 promulgated under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or such person's substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Lara Sullivan Lara Sullivan, M.D.	Chief Executive Officer; Director (Principal Executive Officer)	September 17, 2021
/s/ Pamela Connealy Pamela Connealy	Chief Financial Officer (Principal Financial and Accounting Officer)	September 17, 2021
/s/ David Steinberg David Steinberg	Chairman of the Board of Directors	September 17, 2021
/s/ John Flavin John Flavin	Director	September 17, 2021
/s/ Lucio Iannone Lucio Iannone, Ph.D.	Director	September 17, 2021
/s/ Gotham Makker Gotham Makker, M.D.	Director	September 17, 2021
/s/ Christopher O'Donnell Christopher O'Donnell, Ph.D.	Director	September 17, 2021

Signature		Title	Date
/s/ Mark Chin Mark Chin	Director		September 17, 2021
/s/ Freda Lewis-Hall Freda Lewis-Hall, M.D.	Director		September 17, 2021
/s/ Thomas Civik Thomas Civik	Director		September 17, 2021
/s/ Darren Cline Darren Cline	Director		September 17, 2021

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**") is made effective as of the 8th day of December, 2020 (the "**Execution Date**"), by and between Pyxis Oncology, Inc., a corporation organized and existing under the laws of Delaware with offices at 35 Cambridgepark Drive Suite 100-R, Cambridge, MA02140 ("**Pyxis**") and Pfizer Inc., a corporation organized and existing under the laws of Delaware with offices at 235 East 42nd Street, New York, New York 10017 ("**Pfizer**"). Pyxis and Pfizer may, from time-to-time, be individually referred to as a "**Party**" and collectively referred to as the "**Parties**".

RECITALS

WHEREAS, Pfizer Controls the Licensed ADC Technology and Licensed Platform Technology (each, as hereinafter defined); and

WHEREAS, Pyxis wishes to obtain, and Pfizer wishes to grant, certain licenses under the Licensed ADC Technology and Licensed Platform Technology on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual agreements and covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties, intending to be legally bound hereby, agree to the foregoing and as follows:

1. DEFINITIONS.

1.1. "**ADC**" or "**Antibody Drug Conjugate**" means a pharmaceutical product that contains an antibody chemically conjugated or otherwise attached to a payload with a linker.

1.2. "**ADC-1**" means a Product that (i) contains Pfizer's proprietary compound, [***] or any analogs, derivatives, solvates, salt forms, bases, anhydrides, hydrates, polymorphs, prodrugs, metabolites and ester forms thereof or (ii) is Directed to EDB.

1.3. "**ADC-2**" means a Product that (i) contains Pfizer's proprietary compound, [***] or any analogs, derivatives, solvates, salt forms, bases, anhydrides, hydrates, polymorphs, prodrugs, metabolites and ester forms thereof or (ii) is Directed to CD123.

1.4. "**ADC-3**" means the first Product, other than ADC-1 or ADC-2, Directed to a Licensed Target to receive the applicable Regulatory Approval.

1.5. "**ADC-4**" means the first Product, other than ADC-1, ADC-2 or ADC-3, Directed to a Licensed Target to receive the applicable Regulatory Approval.

1.6. "**Additional ADC**" means the first Product, other than ADC-1, ADC-2, ADC-3 or ADC-4, Directed to a Licensed Target to receive the applicable Regulatory Approval.

1.7. "**Additional Target**" is defined in Section 2.2.

1.8. "**Additional Target Designation Date**" is defined in Section 2.2.

1.9. "**Additional Third Party License**" is defined in Section 6.6.2(b).

1.10. "**Affiliate**" means, with respect to a Party, any Person that, on the Execution Date or during the Term, controls, is controlled by, or is under common control with that Party. For the purpose of this definition, "**control**" shall refer to: (a) the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of an entity, whether through the ownership of voting securities or other ownership interest, by contract or otherwise, or (b) the ownership, directly or indirectly, of fifty percent (50%) or more of the voting securities or other ownership interest of such entity.

1.11. "**Agreement**" is defined in the introduction to this Agreement.

1.12. "**Agreement ADC**" means any ADC, including ADC-1, ADC-2, ADC-3, ADC-4 and any Additional ADC, Developed, Manufactured or Commercialized by Pyxis, its Affiliates or Sublicensees utilizing the Licensed ADC Technology or Licensed Platform Technology and Directed to a Licensed Target, including any modifications to the amino acid sequence of the antibody included in such ADC made by or on behalf of Pyxis or its Affiliates or Sublicensees.

1.13. "**Applicable Law**" means any applicable law, statute, rule, regulation, order, judgment or ordinance of any Governmental Authority.

1.14. "**Bankruptcy Code**" is defined in Section 1.15.

1.15. "**Bankruptcy Event**" means the occurrence of any of the following: (a) the institution of any bankruptcy, receivership, insolvency, reorganization or other similar proceedings by or against a Party under any bankruptcy, insolvency, or other similar law now or hereinafter in effect, including any section or chapter of the United States Bankruptcy Code, as amended or under any similar laws or statutes of the United States or any state thereof (the "**Bankruptcy Code**"), where in the case of involuntary proceedings such proceedings have not been dismissed or discharged within ninety (90) days after they are instituted, (b) the insolvency or making of an assignment for the benefit of creditors or the admittance by a Party of any involuntary debts as they mature, (c) the institution of any reorganization, arrangement or other readjustment of debt plan of a Party not involving the Bankruptcy Code, (d) appointment of a receiver for all or substantially all of a Party's assets, or (e) any corporate action taken by the board of directors of a Party in furtherance of any of the foregoing actions.

1.16. "**Business Day**" means any day other than a Saturday, a Sunday or a day on which commercial banks located in New York, New York are authorized or required by Applicable Law to remain closed.

1.17. "**Biosimilar Product**" means, on a country-by-country basis, a biologic product determined by the FDA or other Regulatory Authority outside of the United States to be biosimilar or interchangeable with a Product under Applicable Law. A Product licensed, marketed, sold, manufactured or produced by Pyxis, its Affiliates, or Sublicensees will not constitute a Biosimilar Product.

1.18. "**BLA**" means a Biologics License Application filed with the FDA in the United States with respect to a Product, as defined in Title 21 of the U.S. Code of Federal Regulations, Section 601.2 et. seq.

1.19. "**Calendar Quarter**" means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

1.20. "**Calendar Year**" means each calendar year.

1.21. "**Cap**" is defined in Section 13.2.

1.22. "**CDA**" is defined in Section 18.11.1.

1.23. "**Change of Control**" means, with respect to a Party, whether effected in a single transaction or a series of related transactions, (a) the acquisition of beneficial ownership, directly or indirectly, by any Person (other than such Party or an Affiliate of such Party) of securities or other voting interest of such Party representing a majority or more of the combined voting power of such Party's then-outstanding securities or other voting interests; (b) any merger, reorganization, consolidation, share exchange, business combination or similar transaction involving such Party (i) pursuant to which more than fifty percent (50%) or more of the outstanding voting securities of such Party (or, if applicable, the ultimate parent of such Party) would be converted into cash or securities of any other Person or (ii) that results in the holders of beneficial ownership of the voting securities or other voting interests of such Party (or, if applicable, the ultimate parent of such Party) immediately prior to such merger, reorganization, consolidation or business combination ceasing to hold beneficial ownership of more than fifty percent (50%) of the combined voting power of the surviving entity immediately after such merger, reorganization, consolidation, share exchange, business combination or similar transaction; (c) any sale, lease, exchange, contribution or other transfer of all or any substantially all of the assets of such Party and its subsidiaries taken as a whole, other than the sale or disposition of such assets to an Affiliate of such Party; or (d) the approval of any plan or proposal for the liquidation or dissolution of such Party. Notwithstanding the foregoing, a Change of Control shall exclude a bona fide equity financing primarily for capital raising purposes, including a Series B Financing, and an IPO.

1.24. "**Claims**" means collectively, any and all demands, claims, actions and proceedings (whether criminal or civil, in contract, tort or otherwise) for losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees).

1.25. "**CMO**" means a contract manufacturing organization.

1.26. "**Combination Product**" means a Product with one (1) or more active ingredients (whether combined in a single formulation or package, as applicable, or formulated or packaged separately but sold together for a single price in a manner consistent with the terms of this Agreement).

1.27. "**Commercialize**" or "**Commercialization**" means to market, promote, distribute, offer for sale, sell, import, have imported, export, have exported or otherwise commercialize an ADC or product. When used as a noun, "**Commercialization**" means any and all activities involved in Commercializing.

1.28. "**Commercially Reasonable Efforts**" means, with respect to the Development or Commercialization of a Product, that level of efforts and resources commonly dedicated by a company in the research-based pharmaceutical industry to the development or commercialization, as the case may be, of a product of similar commercial potential at a similar stage in its lifecycle, in each case taking into account issues of safety and efficacy, product profile, the proprietary position, the then-current competitive environment for such product, the country of Development or Commercialization and the likely timing of such product's entry into the market, the regulatory environment and the status of such product, and other relevant scientific, technical and commercial factors.

1.29. "**Compliance Laws**" is defined in Section 11.4.

1.30. "**Confidential Information**" is defined in Section 10.1.

1.31. "**Control**" or "**Controlled**" means, with respect to any Intellectual Property Rights or other rights to provide data or other information, the legal authority or right (whether by ownership, license or otherwise) of a Party to grant a license or a sublicense of or under such Intellectual Property Rights to the other Party or provide such data or other information to such other Party without breaching the terms of any agreement with a Third Party.

1.32. "**CRO**" means a contract research organization.

1.33. "**Develop**" or "**Development**" means to conduct any and all research and development activities necessary to obtain Regulatory Approval.

1.34. "**Developed IP**" means any Intellectual Property Rights that are both: (a) related to a Product, and (b) conceived or reduced to practice by Pyxis, its Affiliates or Sublicensees alone or together with one or more Third Parties during the Term.

1.35. "**Development Milestone**" is defined in Section 6.4.

1.36. "**Development Milestone Payment**" is defined in Section 6.4.

1.37. "**Directed to**" means, when used to describe the relationship between a molecule and the Licensed Target, that the ADC or Product (i) binds to the Licensed Target (or a portion thereof) and (ii) is designed or being Developed to exert its biological effect in whole or in part through binding to such Licensed Target (or such portion thereof).

1.38. "**Disputes**" is defined in Section 17.1.1.

1.39. "**EDB**" is defined in Section 1.52.

1.40. "**Effective Date**" is the later of the (i) Upfront Payment Date or (ii) the Equity Issuance Date.

1.41. "**Election Notice**" is defined in Section 8.2.3.

1.42. "**EU Major Market Country**" means any of France, Germany, Italy, Japan, Spain, or the United Kingdom.

1.43. "**Excluded Targets**" is defined in Section 2.3.

1.44. "**Execution Date**" is defined in the introduction to this Agreement.

1.45. "**Existing Agreements**" is defined in Section 2.3.

1.46. "**FDA**" means the United States Food and Drug Administration, or a successor federal agency thereto.

1.47. "**Fees**" means the Upfront Payment, any Milestone Payments, Royalties, Sublicensing Income payments and the Transaction Completion Payment.

1.48. "**Field**" means the treatment, prevention, diagnosis, control and maintenance of all diseases and disorders.

1.49. "**First Commercial Sale**" means the first sale of a Product by Pyxis or Pyxis's Affiliate or Sublicensee to a Third Party in a country in the Territory following receipt of Regulatory Approval for such Product in such country.

1.50. "**Force Majeure Event**" is defined in Section 18.4.

1.51. "**GAAP**" means United States generally accepted accounting principles or an alternative international generally accepted standard of accounting principles used by Pyxis, including International Reporting Financial Standards, in each case consistently applied.

1.52. "**Governmental Authority**" means any national, federal, state or local organization or authority, or any foreign government or any political subdivision thereof, or any multinational organization or authority, or any authority, agency or commission entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power, or any court or tribunal (or any department, bureau or division thereof), or any governmental arbitrator or arbitral body.

1.53. "**Government Official**" means: (A) any elected or appointed government official (e.g., a member of a ministry of health), (B) any employee or person acting for or on behalf of a government official, agency, or enterprise performing a governmental function, (C) any political party officer, employee, or person acting for or on behalf of a political party or candidate for public office, (D) an employee or person acting for or on behalf of a public international organization, or (E) any person otherwise categorized as a government official under local law. "Government" is meant to include all levels and subdivisions of non-U.S. governments (i.e., local, regional, or national and administrative, legislative, or executive).

1.54. "**IND**" means: (a) an investigational new drug application filed with the FDA for authorization for the investigation of a Product, and (b) any of its foreign equivalents as filed with the applicable Regulatory Authorities in other countries or regulatory jurisdictions in the Territory, as applicable.

1.55. "**Initial Targets**" means extra domain B (EDB of fibronectin) ("**EDB**") and CD123.

1.56. "**Intellectual Property Rights**" means all trade secrets, copyrights, Patent Rights, trademarks, moral rights, Know-How and any and all other intellectual property or proprietary rights now known or hereafter recognized in any jurisdiction.

1.57. "**IPO**" means the first underwritten public offering of equity securities of Pyxis (or any successor thereto formed for the purpose of pursuing an initial public offering) pursuant to an effective registration statement filed with the United States Securities and Exchange Commission (or any successor form) including a transaction with a special purpose acquisition company, plan of arrangement, amalgamation, direct listing, reverse take-over or other business combination pursuant to which the securities of Pyxis, or any resulting issuer or parent entity thereof, are listed on a stock exchange; *provided* that an IPO shall not include any registration of the issuance of securities to existing securityholders or employees of Pyxis on Form S-4 or Form S-8 (or any successor forms).

1.58. "**Know-How**" means any proprietary invention, discovery, development, data, information, process, method, technique or other know-how, whether or not patentable.

1.59. "**Knowledge**" means actual knowledge of the individuals listed on Schedule 1.59 and is not meant to require or imply that any particular inquiry or investigation has been undertaken, including, without limitation, obtaining any type of search (independent of that performed by the actual Governmental Authority during the normal course of patent prosecution, as applicable, in a jurisdiction) or opinion of counsel.

1.60. "**Licensed ADC Know-How**" means the Know-How set forth on Exhibit 1.60.

1.61. "**Licensed ADC Patent Rights**" means the Patent Rights set forth on Schedule 1.61 hereto.

1.62. "**Licensed ADC Technology**" means, collectively, the Licensed ADC Patent Rights and Licensed ADC Know-How.

1.63. "**Licensed Platform Know-How**" means the documents set forth on Schedule 1.63 hereto.

1.64. "**Licensed Platform Patent Rights**" means the Patent Rights set forth on Schedule 1.64 hereto.

1.65. "**Licensed Platform Technology**" means the Licensed Platform Know-How and Licensed Platform Patent Rights.

1.66. "**Licensed Targets**" means, collectively, the Initial Targets and each Additional Target, as set forth on Schedule 1.66, as may be updated from time to time upon designation of each Additional Target on the Additional Target Designation Date.

1.67. "**Linker-Payload**" means the [***].

1.68. "**Major Market Country**" means any EU Major Market Country or the United States.

1.69. "**Manufacture**" or "**Manufacturing**" means to make, produce, manufacture, process, fill, finish, package, label, perform quality assurance testing, release, ship or store an ADC product or any component thereof. When used as a noun, "**Manufacture**" or "**Manufacturing**" means any and all activities involved in Manufacturing an ADC or product or any component thereof.

1.70. "**Milestone Payments**" means, collectively, the Development Milestone Payments and Sales Milestone Payments.

1.71. "**Necessary**" is defined in Section 6.6.2(b).

1.72. "**Negotiation Period**" is defined in Section 3.5.3.

1.73. "**Negotiation Trigger**" is defined in Section 3.5.1(b).

1.74. "**Negotiation Trigger Notice**" is defined in Section 3.5.1.

1.75. "**Net Sales**" means [***]

1.76. "**Notice Period**" is defined in Section 3.5.2.

1.77. "**Other Component**" means any therapeutically active drug or biological ingredient that is not an Agreement ADC (including any product of Pyxis).

1.78. "**Party**" and "**Parties**" is defined in the introduction to this Agreement.

1.79. "**Patent Rights**" means any and all (a) issued patents, (b) pending patent applications, including all provisional applications, divisions, continuations, substitutions, continuations-in-part and renewals, and all patents granted thereon, (c) patents-of-addition, re-examinations, reissues and extensions or restorations by existing or future extension or restoration mechanisms, including patent term adjustments, patent term extensions, supplementary protection certificates or the equivalent thereof, (d) inventor's certificates, (e) other forms of government-issued rights substantially similar to any of the foregoing and (f) United States and foreign counterparts of any of the foregoing.

1.80. "**Person**" means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, Governmental Authority or any other form of entity not specifically listed herein.

1.81. "**Pfizer**" is defined introduction to this Agreement.

1.82. "**Phase I Clinical Trial**" means a clinical trial that generally provides for the first introduction into humans of a pharmaceutical product with the primary purpose of determining safety, metabolism and pharmacokinetic properties and clinical pharmacology of such product, in a manner that is generally consistent with 21 CFR § 312.21(a), as amended (or its successor regulation).

1.83. "**Phase II Clinical Trial**" means a clinical trial, the principal purpose of which is to make a preliminary determination as to whether a pharmaceutical product is safe for its intended use and to obtain sufficient information about such product's efficacy, in a manner that is generally consistent with 21 C.F.R. § 312.21(b), as amended (or its successor regulation), to permit the design of further clinical trials.

1.84. "**Phase III Clinical Trial**" means a pivotal clinical trial with a defined dose or a set of defined doses of a pharmaceutical product designed to ascertain efficacy and safety of such product, in a manner that is generally consistent with 21CFR § 312.21(c), as amended (or its successor regulation), for the purpose of enabling the preparation and submission of a BLA.

1.85. "**Product**" means any pharmaceutical product in any form or formulation suitable for administration to patients which contains one or more Agreement ADCs as an active ingredient.

1.86. "**Pyxis**" is defined in the introduction to this Agreement.

1.87. "**Recipients**" is defined in Section 10.2.

1.88. "**Regulatory Approval**" means, with respect to a Product in any country or jurisdiction, any approval, registration, license or authorization that is required by the applicable Regulatory Authority to market and sell a Product in such country or jurisdiction.

1.89. "**Regulatory Authority**" means any Governmental Authority responsible for granting Regulatory Approvals for a Product in the Territory.

1.90. "**Regulatory Filings**" means, with respect to a Product, any submission to a Regulatory Authority of any appropriate regulatory application, including, without limitation, any IND, BLA, any submission to a regulatory advisory board, any marketing authorization application, and any supplement or amendment thereto.

1.91. "**Relevant Records**" is defined in Section 7.1.

1.92. "**Review Period**" is defined in Section 15.3.

1.93. "**Royalties**" is defined in Section 6.6.1.

1.94. "**Royalty Term**" means, with respect to each Product in each country in the Territory, the period commencing on the First Commercial Sale of such Product in such country and expiring upon the later of: (a) [***] following the date of First Commercial Sale of such Product in such country, (b) the expiration of all regulatory or data exclusivity for such Product in such country or (c) the date upon which the Manufacture, use, sale, offer for sale or importation of such Product in such country would no longer infringe, but for the license granted herein, a Valid Claim of a Licensed ADC Patent Right.

1.95. "**Sale Transaction**" is defined in Section 6.8.1.

1.96. "**Sales Milestone**" is defined in Section 6.5.1.

1.97. "**Sales Milestone Payment**" is defined in Section 6.5.1.

1.98. "**Series B Financing**" means the financing of Pyxis, whereby Pyxis obtains a minimum of [***] from the sale and issuance of shares of Pyxis's Series B Preferred Stock (the "**Series B Preferred Stock**") in one or more closings, pursuant to the Series B Preferred Stock Purchase Agreement.

1.99. "**Series B Preferred Stock**" is defined in Section 1.97.

1.100. "**Series B Preferred Stock Purchase Agreement**" means that certain Series B Preferred Stock Purchase Agreement to be executed and delivered by Pfizer and certain other investors following the Execution Date.

1.101. "**Shares**" is defined in Section 6.1.

1.102. "**Sublicense**" means any right granted, license given or agreement entered into by Pyxis in which Pyxis grants or otherwise transfers any rights under the Licensed ADC Technology (and Licensed Platform Technology when licensed in connection with a Licensed ADC or Product) to a Third Party other than pursuant to a Change of Control.

1.103. "**Sublicensee**" means any Third Party to which Pyxis has granted a Sublicense under this Agreement.

1.104. "**Sublicensing Income**" means [***].

1.105. "**Target**" means a protein and any structural or other variant, subunit, fragment or derivative thereof that is identified by a GenBank or EMBL accession number or similar information, or by its amino acid or nucleic acid sequence.

1.106. "**Target Designation Date**" means, with respect to the Initial Targets, the Effective Date, and with respect to Additional Targets, the Additional Target Designation Date.

1.107. "**Target Designation Notice**" is defined in Section 2.2.

1.108. "**Target-Specific Transaction**" is defined in Section 3.5.

1.109. "**Tax Action**" is defined in Section 6.13.2.

1.110. "**Term**" is defined in Section 14.1.

1.111. "**Terminated Product**" is defined in Section 14.4.

1.112. "**Territory**" means worldwide.

1.113. "**Third Party**" means any Person other than a Party or an Affiliate of a Party.

1.114. "**Third Party Infringement**" is defined in Section 9.1.

1.115. "**Transaction Completion Payment**" is defined in Section 6.8.1.

1.116. "**Transaction Negotiation Notice**" is defined in Section 3.5.2.

1.117. "**Transaction Value**" is defined in Section 6.8.1.

1.118. "**Transferred Contracts**" is defined in Section 4.2.

1.119. "**Tumor Type**" means a particular oncologic malignancy based on the organ or tissue in which the malignancy originates. A breast Tumor Type will be a different Tumor Type from a pancreatic Tumor Type, but a HER2+ breast Tumor Type will be the same Tumor Type as a BRCA1 breast Tumor Type.

1.120. "**Upfront Payment**" is defined in Section 6.2.

1.121. "**Valid Claim**" means with respect to a particular country, a claim of a Patent Right within the Licensed ADC Patent Rights that (a) with respect to an issued and unexpired patent, (i) has not been held permanently revoked, unenforceable or invalid by a decision of a court or other Governmental Authority of competent jurisdiction, which decision is unappealed or unappealable within the time allowed for appeal and (ii) has not expired or been cancelled, withdrawn, abandoned, disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise and (b) with respect to a pending patent application, (i) has not been abandoned or finally disallowed without the possibility of appeal or refiling of such application and (ii) has not been pending for more than [***] years from the earliest priority date of the first Patent Right in such family.

1.122. "**VAT**" is defined in Section 6.13.1.

1.123. "**Vendor**" means a Third Party engaged by Pyxis to perform Development or Commercialization activities on Pyxis's behalf, including a clinical research organization, contract manufacturing organization, a distributor, a subcontractor, a consultant or other service provider.

Interpretation. Except where the context expressly requires otherwise, (a) the use of any gender herein shall be deemed to encompass references to either or both genders, and the use of the singular shall be deemed to include the plural (and vice versa), (b) the words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation", (c) the word "will" shall be construed to have the same meaning and effect as the word "shall",

(d) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (e) any reference herein to any Person shall be construed to include the Person's successors and assigns, (f) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (g) all references herein to Sections, Exhibits or Schedules shall be construed to refer to Sections, Exhibits or Schedules of this Agreement, and references to this Agreement include all Exhibits and Schedules hereto, (h) the word "notice" means notice in writing (whether or not specifically stated) and shall include notices, consents, approvals and other written communications contemplated under this Agreement, (i) provisions that require that a Party, the Parties or any committee hereunder "agree," "consent" or "approve" or the like shall require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise (but excluding e-mail and instant messaging), (j) references to any specific law, rule or regulation, or article, section or other division thereof, shall be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof, and (k) the term "or" shall be interpreted in the inclusive sense commonly associated with the term "and/or."

2. TARGET DESIGNATION.

2.1. Initial Targets. Pyxis hereby designates EDB and CD123 as the Initial Targets under this Agreement as of the Effective Date.

2.2. Additional Targets. From time to time following the Effective Date during the Term, Pyxis has the right to add additional Targets under this Agreement as Licensed Targets, subject to availability of such Target. Pyxis may elect to add a Target (an "**Additional Target**") as a Licensed Target by providing Pfizer a written notice (the "**Target Designation Notice**"), including, to the extent available, a GenBank or EMBL accession number for such Additional Target, to add such Additional Target as a Licensed Target. Within [***] following receipt of the Target Designation Notice Pfizer will notify Pyxis in writing if such Target is an available to be added as an Additional Target. So long as such proposed Additional Target is available, such Target shall be deemed a Licensed Target for purposes of this Agreement following receipt by Pfizer of payment as set forth in Section 6.3 (each such date a "**Additional Target Designation Date**").

2.3. Excluded Targets. Pyxis acknowledges that, as of the Execution Date, (a) Pfizer has licensed one or more Targets to one or more Third Parties and such Excluded Targets are not available to be designated as Additional Targets under this Agreement, (b) Pfizer is a party to one or more agreements with Third Parties (the "**Existing Agreements**") pursuant to which such Third Parties have the right to exclusively license additional Targets other than the Initial Targets, and (c) Pfizer is Developing ADCs directed to certain Target(s). The Targets that are (i) licensed to a Third Party as of the Execution Date, (ii) licensed to a Third Party as of the Effective Date, (iii) exclusively licensed to a Third Party following the Execution Date, or (iv) are being developed by Pfizer as of the Execution Date or at any time following the Execution Date, are collectively referred to herein as the "**Excluded Targets**." All Targets other than the Excluded Targets shall be deemed "available" as of the Execution Date for purposes of Section 2.2 of this Agreement; provided however that any such Target may not be "available" at the time Pyxis provides Pfizer with a Target Designation Notice.

3. LICENSE GRANTS.

3.1. License Grants.

3.1.1. Licensed ADC Patent Rights. Subject to the terms and conditions of this Agreement, as of Effective Date on a Licensed Target-by-Licensed Target basis and effective on the Target Designation Date for such Licensed Target, Pfizer hereby grants to Pyxis an exclusive (even as to Pfizer), sublicensable through multiple tiers (subject to Section 3.2), royalty-bearing right and license under the Licensed ADC Patent Rights to use, have used, Develop, have Developed, Manufacture, have Manufactured, Commercialize, have Commercialized and otherwise exploit Agreement ADCs and Products in the Field within the Territory.

3.1.2. Licensed ADC Know How. Subject to the terms and conditions of this Agreement, as of Effective Date on a Licensed Target-by-Licensed Target basis and effective on the Target Designation Date for such Licensed Target, Pfizer hereby grants to Pyxis a non-exclusive, sublicensable through multiple tiers (subject to Section 3.2), royalty-bearing right and license to use the Licensed ADC Know-How use, have used, Develop, have Developed, Manufacture, have Manufactured, Commercialize, have Commercialized and otherwise exploit Agreement ADCs and Products in the Field within the Territory.

3.1.3. Licensed Platform Technology. Subject to the terms and conditions of this Agreement, as of Effective Date on a Licensed Target-by-Licensed Target basis and effective on the Target Designation Date for such Licensed Target, Pfizer hereby grants to Pyxis a non-exclusive, sublicensable through multiple tiers (subject to Section 3.2) license under the Licensed Platform Technology solely to use, have used, Develop, have Developed, Manufacture, have Manufactured, Commercialize, have Commercialized and otherwise exploit Agreement ADCs and Products in the Field within the Territory.

3.1.4. Affiliates. To the extent any of the Licensed ADC Technology or Licensed Platform Technology is Controlled by an Affiliate of Pfizer, then promptly following the Effective Date, Pfizer shall cause such Affiliate to take all necessary actions to give effect to the licenses granted under this Section 3.1.

3.2. Sublicense Rights. Following the Effective Date, Pyxis may sublicense the rights granted to it by Pfizer under this Agreement to any of its Affiliates or to any Sublicensee without Pfizer’s approval; provided that the sublicense of any rights pursuant to Section 3.1.3 will only be made in connection with a sublicense of rights pursuant to Section 3.1.1 or Section 3.1.2. Any and all Sublicenses shall be subject to the following requirements:

3.2.1. All Sublicenses shall be subject to and consistent with the terms and conditions of this Agreement and shall preclude the assignment of such Sublicense without the prior written approval of Pfizer. In no event shall any Sublicense relieve Pyxis of any of its obligations under this Agreement.

3.2.2. Pyxis shall furnish to Pfizer a true and complete copy of each Sublicense agreement and each amendment thereto (other than any Sublicense with an Affiliate or Vendor), within [***] after the agreement or amendment has been executed.

3.3. Retained Rights. Pyxis acknowledges and agrees that (a) Pfizer retains the right to make, have made, use and import any Agreement ADCs and Products for all internal research purposes; *provided*, that Pfizer shall not have the right to conduct clinical trials to Develop Agreement ADCs or Products in the Field, (b) Pfizer is free to use the Licensed ADC Patent Rights for purposes other than those exclusively licensed to Pyxis under this Agreement and (c) the rights that have been or may be provided by Pfizer to (i) a reagent supplier, such as Sigma Aldrich Co., to make or sell Agreement ADCs or Products or (ii) a non-commercial entity to use Agreement ADCs or Products, in each case in the form of non-GMP samples of Agreement ADCs or Products in mg quantities solely as a research reagent.

3.4. No Additional Rights. Nothing in this Agreement shall be construed to confer any rights upon Pyxis by implication, estoppel, or otherwise as to any technology or Intellectual Property Rights of Pfizer or its Affiliates other than the rights in Licensed ADC Technology and Licensed Platform Technology expressly granted herein, regardless of whether such technology or Intellectual Property Rights shall be dominant or subordinate to any Licensed ADC Technology or Licensed Platform Technology.

3.5. Right of First Negotiation. Pyxis will, and hereby does, grant Pfizer on a Licensed Target-by-Licensed Target basis, the right to negotiate, on an exclusive basis, an agreement to purchase (other than through a Sale Transaction) the right(s) to any or all Agreement ADCs and Products Directed to such Licensed Target, or an agreement to exclusively license right(s) to develop, manufacture and commercialize any or all Agreement ADCs and Products Directed to such Licensed Target in one or more Major Market Countries (a "**Target-Specific Transaction**"), as follows:

3.5.1. Subject to the limitation set forth in Section 3.5.2, Pyxis shall provide Pfizer with written notice and information in sufficient detail, including any information reasonably requested by Pfizer (subject to confidentiality obligations), to enable Pfizer to make an informed decision (a "**Negotiation Trigger Notice**") for each Licensed Target promptly following:

(a) [***], or

(b) [***] (each such event described in clause (a) or (b), a "**Negotiation Trigger**").

3.5.2. Pfizer will have [***] (the "**Notice Period**") after receipt of a Negotiation Trigger Notice to notify Pyxis in writing that it desires to enter into good faith negotiations with respect to a Target-Specific Transaction (such notice, a "**Transaction Negotiation Notice**"). The Transaction Negotiation Notice delivered by Pfizer shall include, at a minimum, bona fide material financial terms on which Pfizer proposes to enter into the applicable Target-Specific Transaction. If the Negotiation Trigger was provided to Pfizer in accordance with Section 3.5.1(a) prior to the occurrence of the events in Section 3.5.1(b) and Pfizer does not provide such Transaction Negotiation Notice to Pyxis within such Notice Period, Pyxis shall provide a Negotiation Trigger

Notice to Pfizer upon the occurrence of the Negotiation Trigger set forth in Section 3.5.1(b). If the Negotiation Trigger was provided to Pfizer in accordance with Section 3.5.1(b) prior to the occurrence of the events in Section 3.5.1(a), Pyxis shall have no obligation to provide any additional Negotiation Trigger Notice. The provisions of this Section 3.5 will apply with respect to each Licensed Target.

3.5.3. If Pfizer provides such Transaction Negotiation Notice during such Notice Period, then the Parties will negotiate exclusively in good faith for a period of [***] (the "**Negotiation Period**") the terms of a Target-Specific Transaction, which Negotiation Period may be extended by the mutual agreement of the Parties. If Pfizer does not provide a Transaction Negotiation Notice to Pyxis within the applicable Notice Period, or if the Parties do not enter into a Target-Specific Transaction within the Negotiation Period, then Pyxis will be free to enter into a Target-Specific Transaction with a Third Party and Pyxis shall have no further obligation to provide a Negotiation Trigger Notice upon the occurrence of any additional Negotiation Trigger with respect to such Licensed Target. For clarity, in no event shall Pyxis be required to provide Pfizer with a Negotiation Trigger Notice with respect to any Licensed Target more than once for the same Negotiation Trigger.

3.5.4. The rights granted to Pfizer and the obligations of Pyxis under this Section 3.5.4 shall terminate (a) in their entirety on the earliest of (i) [***], (ii) [***], or (iii) [***], or (b) with respect to [***], [***].

3.5.5. Notwithstanding anything to the contrary herein, (a) nothing shall prevent Pyxis or any of its Affiliates from negotiating or executing any confidentiality agreement or participating in general discussions (not focused on a Target-Specific Transaction) with any prospective partner, investor, licensor, licensee or other Third Party or (b) Pyxis shall have no obligation to provide Pfizer with the identity of any Third Party or any terms of any transaction negotiated with a Third Party.

4. TRANSFER ACTIVITIES.

4.1. Transfer Activities. Schedule 4 sets forth the documentation and materials that Pfizer will transfer to Pyxis and related activities to be performed by the Parties following the Effective Date. Pfizer shall use Commercially Reasonable Efforts to conduct the transfer activities set forth on Schedule 4 in accordance with the timelines and other requirements set forth therein.

4.2. Transfer Agreements. Following the Execution Date, the Parties shall negotiate in good faith a bill of sale, which shall be executed on the Effective Date, pursuant to which Pfizer will transfer all right, title and interest in and to the assets set forth under "Exhibit A" on Schedule 4.

5. DEVELOPMENT; COMMERCIALIZATION; MANUFACTURING.

5.1. General. Pyxis shall have sole responsibility for the cost and expense of, and the sole authority over and control of, the Development, Manufacture, Regulatory Approval and Commercialization of Agreement ADCs and Products in the Field within the Territory.

5.2. Diligence.

5.2.1. Development. Pyxis shall itself, or through its Affiliates or Sublicensees, use Commercially Reasonable Efforts to:

(a) Nominate a clinical candidate within [***] of a Target becoming a Licensed Target; and

(b) Develop and seek Regulatory Approval for at least one Product Directed to each Licensed Target in the United States and [***].

5.2.2. Commercialization. Pyxis shall itself, or through its Affiliates or Sublicensees, use Commercially Reasonable Efforts to Commercialize each Product in each Major Market Country in the Territory where Pyxis or its designated Affiliates or Sublicensees receives Regulatory Approval for such Product.

5.3. Regulatory Filings. In connection with its efforts to Develop a Product, Pyxis shall bear all responsibility and expense for submitting Regulatory Filings and obtaining Regulatory Approval for such Product. Pyxis will undertake such activities at its sole expense.

5.4. Progress Reporting. From and after the Effective Date until the First Commercial Sale of the a Product Directed to a Licensed Target, Pyxis shall provide to Pfizer a report within [***] of each calendar year end, including (a) an update on the progress of Pyxis's Development and Commercialization activities for each Licensed Target, including key achievements in the prior Calendar Year and (b) a summary of the planned Development and Commercialization activities for each Licensed Target for the upcoming Calendar Year, including key achievements that are expected and (c) a non-binding good faith forecast of material Development Milestone Payments with respect to each Licensed Target and Product that are anticipated to be made to Pfizer pursuant to Section 6.4 during the next one (1) year period, which shall be reported on a Calendar Quarter basis. After the First Commercial Sale of a Product, Pyxis shall include is such annual reports a summary of the Commercialization and sales of all Products, as applicable.

5.5. U.S. Manufacturing. Pyxis agrees that, to the extent required, it shall comply with the applicable requirements of 35 U.S.C. § 204 in connection with Manufacturing each Product.

5.6. Supply of Linker-Payload. From and after the Effective Date until such time as agreed to by the Parties in writing, Pfizer will facilitate, in accordance with a supply agreement between Pfizer and Pyxis, either directly, or indirectly, the supply to Pyxis of the Linker-Payload to Pyxis in order for Pyxis to carry out activities related to the Development and Commercialization of Agreement ADCs and Products. The Parties will use commercially reasonable efforts to enter into a Linker-Payload supply agreement [***] following the Effective Date.

6. PAYMENT TERMS.

6.1. Equity. In partial consideration of the licenses and rights granted to Pyxis hereunder, Pyxis will issue and grant to Pfizer, such number of shares of Pyxis's Series B Preferred Stock (the "**Shares**") equivalent to [***] at a per share price equal to the price per share paid by the investors in the Series B Financing (the "**Equity Issuance**"). Such Shares will be issued immediately following the initial closing of the Series B Financing pursuant to the Series B Preferred Stock Purchase Agreement (the "**Equity Issuance Date**"). Pfizer, as the owner of Shares, shall have rights and obligations on parity with, and with the same terms and conditions as, other investors purchasing shares of Series B Preferred Stock under the Series B Preferred Stock Purchase Agreement.

6.2. Upfront Payment. In partial consideration of the licenses and rights granted to Pyxis hereunder, Pyxis shall pay to Pfizer a one-time, upfront, non-refundable and non-creditable payment of [***] (the "**Upfront Payment**") on the earlier to occur of: (a) [***] following the initial closing of the Series B Financing and (b) [***] (the "**Upfront Payment Date**").

6.3. Additional Target Acceptance Payment. In partial consideration of the exclusive license to each Additional Target that becomes a Licensed Target and rights granted in Section 3.1, Pyxis shall pay to Pfizer an upfront, non-refundable and non-creditable payment of [***] promptly following, but in no event more than [***] following, selection of each Additional Target in accordance with Section 2.2; *provided* that such Additional Target will not be deemed to be a Licensed Target until such payment pursuant to this Section 6.3 is received by Pfizer.

6.4. Development Milestone Payments. In consideration of the licenses and rights granted to Pyxis hereunder, Pyxis shall pay to Pfizer the one-time amounts set forth below within [***] following the first occurrence of each event described below (each event, a "**Development Milestone**" and each payment, a "**Development Milestone Payment**").

DEVELOPMENT MILESTONE	ADC-1 1st Tumor Type	ADC-1 2nd Tumor Type	ADC-1 3rd Tumor Type
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

DEVELOPMENT MILESTONE	ADC-2	ADC-3	Each Additional ADC
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

For the avoidance of doubt: (i) each Development Milestone Payment shall be payable only once upon achievement of the applicable Development Milestone; and (ii) satisfaction of a Development Milestone by a Sublicensee or assignee of, or Third Party retained by, Pyxis or its Affiliates shall be deemed to have been satisfied by Pyxis for purposes of this Section 6.4.

6.5. Sales Milestone Payments.

6.5.1. In consideration of the licenses and rights granted to Pyxis hereunder, Pyxis shall pay to Pfizer the following one-time payments when cumulative Net Sales of each Product in the Territory first reach the respective indicated below (each event, a "**Sales Milestone**" and each payment, a "**Sales Milestone Payment**") for each respective Product.

ANNUAL NET SALES	ADC-1	ADC-2	ADC-3	ADC-4	EACH ADDITIONAL ADC
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]					

6.5.2. Pyxis shall make any Sales Milestone Payment payable within [***] after the end of the applicable Calendar Quarter in which cumulative Net Sales reach the applicable threshold, and such payment shall be accompanied by a report identifying the amount payable to Pfizer under this Section 6.5.

6.6. Royalty Payments.

6.6.1. In consideration of the licenses and rights granted to Pyxis hereunder, Pyxis shall pay to Pfizer royalties in the amount of the royalty rates (set forth below) on the aggregate Net Sales resulting from the sale of Products, on a Product-by-Product basis, in the Territory during each Calendar Year (collectively, "**Royalties**").

	ROYALTY RATE				
ANNUAL NET SALES	ADC-1	ADC-2	ADC-3	ADC-4	EACH ADDITIONAL ADC
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]

Each Marginal Royalty Rate set forth in the table above shall apply only to that portion of the Net Sales of each Product in the Territory during a given Calendar Year that falls within the indicated range. Pyxis shall pay to Pfizer the applicable Royalties within [***] following the expiration of each Calendar Quarter after the date of the First Commercial Sale. Royalties will be payable on a Product-by-Product and country-by-country basis during the Royalty Term for such

Product in each country until the expiration of the Royalty Term for such Product in each country. All Royalty payments shall be accompanied by a report that includes reasonably detailed information regarding a total monthly sales calculation of Net Sales of Product (including all deductions) and all Royalties payable to Pfizer for the applicable Calendar Quarter (including any foreign exchange rates employed).

6.6.2. Royalty Reductions.

(a) **Third Party Licenses**. Pyxis shall have the right, in its sole discretion, to obtain a license under any Intellectual Property Rights of any Third Party that Pyxis deems is Necessary for Pyxis to Develop, Manufacture, Commercialize a Product (each such Third Party license referred to herein as an "**Additional Third Party License**"). Any royalty otherwise payable to Pfizer under this Agreement (as may be reduced under Section 6.6.2(b)) with respect to Net Sales of Product by Pyxis will be reduced by [***] of the amounts paid to Third Parties pursuant to such Additional Third Party Licenses. For purposes of this Section 6.6.2(a), "**Necessary**" means that, without a license to use the Patent Right in question, the Development, Manufacture, Commercialization or use of any Product, in Pyxis's opinion, infringes such Patent Right.

(b) **Biosimilar Entry**. Notwithstanding the foregoing, for any royalty otherwise payable to Pfizer under this Agreement with respect to Net Sales based on sales of a Product in a given country in the Territory, any such payments owed with respect to such Product in such country pursuant to this Section 6.6.2 will be reduced by [***] for the remainder of the applicable Royalty Term for such Product in such country, such reduction to be prorated for the then-current calendar quarter, once one or more Biosimilar Products of such Product become available, are being sold in such country and cumulatively have at least [***] of the total market in such country, based on unit sales, over a [***] period.

(c) **Royalty Floor**. Notwithstanding the provision of this Section 6.6.2, the maximum reduction of royalties under Section 6.6.1 with respect to any Product in any country in the Territory, will be [***] of the royalties that would be due pursuant to Section 6.6.1 in such country if no adjustments had been taken under this Section 6.6.2.

6.7. Sublicensing Income Payments.

6.7.1. In partial consideration of the licenses and rights granted to Pyxis hereunder, Pyxis shall pay to Pfizer the percentages set forth below of all Sublicensing Income received from any Third Party.

TIME PERIOD OF SUBLICENSING TRANSACTION	SUBLICENSING INCOME PAYMENT RATE
(1) [***]	[***]
(2) [***]	[***]
(3) [***]	[***]

6.7.2. Pyxis shall make Sublicensing Income payments based on Sublicensing Income received during each Calendar Quarter within [***] following the expiration of each such Calendar Quarter. All payments shall be accompanied by a report that includes a calculation of all Sublicensing Income payments payable to Pfizer for the applicable Calendar Quarter and the Product subject to such sublicense.

6.8. Transaction Completion Payment.

6.8.1. If Pyxis completes a Sale Transaction prior to the earlier of (A) twelve (12) months following the Effective Date and (B) the closing of an IPO, Pyxis shall pay to Pfizer a one-time, non-refundable and non-creditable payment in an amount equal to the lesser of (i) [***] of the amounts received upon the closing of such Sale Transaction, any amounts released from any escrow account pursuant to and after the closing of such Sale Transaction, and any contingent payment in such Sale Transaction (collectively the "**Transaction Value**"), or (ii) [***] (such lesser amount, the "**Transaction Completion Payment**"); *provided* that, in no event shall the Transaction Completion Payment payable to Pfizer exceed [***]. The Transaction Completion Payment shall be payable only once under this Section 6.8.1. For purposes of this Section 6.8, "**Sale Transaction**" means either: (A) a Change of Control or (B) a sale, transfer or other divestiture of all or substantially all of Pyxis's assets to which this Agreement relates.

6.8.2. Such payment shall be accompanied by a report that includes (a) for a Sale Transaction, a calculation of the Transaction Value and (b) a copy of any relevant documents to allow Pfizer to confirm the accuracy of such the Transaction Completion Payment.

6.8.3. For a Transaction Completion Payment due under clause (a) of Section 6.8.1, Pyxis or its Affiliate shall make such Transaction Completion Payment within [***] following (i) the closing of the Sale Transaction , and (ii) if the amount paid to Pfizer following the closing of the Sale Transaction is less than [***] each subsequent payment of any amounts to Pyxis and its stockholders in connection with such Sale Transaction until Pfizer has received an aggregate Transaction Completion Payment of [***]. For a Transaction Completion Payment due under clause (b) of Section 6.8.1, Pyxis shall make such Transaction Completion Payment within [***] following receipt of the consideration payable in connection with such Sale Transaction.

6.9. Other Payments. Pyxis shall pay to Pfizer any other amounts due under this Agreement, within [***] following receipt of invoice.

6.10. Late Payments. Any amount required to be paid by a Party hereunder which is not paid on the date due shall bear interest compounded daily, to the extent permitted by law, at [***]. Such interest shall be computed on the basis of a year of three hundred sixty (360) days for the actual number of days payment is delinquent.

6.11. Currency. Any payments under this Section 6.11 that are recorded in currencies other than the U.S. Dollar shall be converted into U.S. Dollars at the average of the daily foreign exchange rates published in the Wall Street Journal (or any other qualified source that is acceptable to both Parties) for the Calendar Quarter in which such payments or expenses occurred, or for periods less than a Calendar Quarter, the average of the daily rates published in the Wall Street Journal for such period.

6.12. Method of Payment. All payments from Pyxis to Pfizer shall be made by wire transfer via immediately available funds in U.S. dollars to credit the bank account set forth below or such other bank account as designated by Pfizer in writing to Pyxis at least [***] before payment is due. Any payment which falls due on a date which is not a Business Day may be made on the next succeeding Business Day.

[***]

6.13. Taxes.

6.13.1. General. It is understood and agreed between the Parties that any payments made under this Agreement are exclusive of any value added or similar tax ("**VAT**"), which shall be added thereon as applicable. In the event any payments made by Pyxis to Pfizer pursuant to this Agreement become subject to withholding taxes under the laws or regulation of any jurisdiction, Pyxis shall deduct and withhold the amount of such taxes for the account of Pfizer to the extent required by Applicable Law and such amounts payable to Pfizer shall be reduced by the amount of taxes deducted and withheld, which shall be treated as paid to Pfizer in accordance with this Agreement. To the extent that Pyxis is required to deduct and withhold taxes on any payments under this Agreement, Pyxis shall pay the amounts of such taxes to the proper Governmental Authority in a timely manner and promptly transmit to the payee an official tax certificate or other evidence of such withholding sufficient to enable Pfizer to claim such payments of taxes. Pfizer shall provide any tax forms to Pyxis that may be reasonably necessary in order for Pyxis not to withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. Each Party shall provide the other with reasonable assistance to enable the recovery, as permitted by Applicable Law, of withholding taxes, VAT, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding tax or VAT.

6.13.2. Tax Actions. Notwithstanding anything in this Agreement to the contrary, if an action, including but not limited to any assignment or sublicense of its rights or obligations under this Agreement, or any failure to comply with Applicable Laws or filing or record retention requirements (a "**Tax Action**") by a Party leads to the imposition of withholding tax liability or VAT on the other Party that would not have been imposed in the absence of a Tax Action or in an increase in such liability above the liability that would have been imposed in the absence of such Tax Action, then (i) the sum payable by the Party that caused the Tax Action (in respect of which such deduction or withholding is required to be made) shall be increased to the extent necessary to ensure that the other Party receives a sum equal to the sum which it would have received had no Tax Action occurred and (ii) the sum payable by the Party that caused a Tax Action (in respect of which such deduction or withholding is required to be made) shall be made to the other Party after deduction of the amount required to be so deducted or withheld, which deducted or withheld amount shall be remitted in accordance with Applicable Law. For the avoidance of doubt, a Party shall only be liable for increased payments pursuant to this Section 6.13.2 to the extent such Party engaged in a Tax Action that created or increased a withholding tax or VAT on the other Party.

6.13.3. Cooperation. The Parties agree to cooperate and produce on a timely basis any tax forms or reports, including an IRS Form W-8BEN, reasonably requested by the other Party in connection with any payment made by Pyxis to Pfizer under this Agreement.

7. RECORDS; AUDIT RIGHTS.

7.1. Relevant Records. Pyxis shall maintain accurate financial books and records pertaining to sale of all Products by Pyxis, its Affiliates or Sublicensees, including any and all calculations of the applicable Fees (collectively, "**Relevant Records**"). Pyxis shall maintain the Relevant Records for the longer of: (a) the period of time required by Applicable Law, or (b) [***] years following expiration or termination of this Agreement.

7.2. Audit Request. Pfizer shall have the right during the term of this Agreement and for [***] thereafter to engage, at its own expense, an independent auditor reasonably acceptable to Pyxis to examine the Relevant Records from time-to-time, [***], as may be necessary to verify compliance with the terms of this Agreement. Such audit shall be requested in writing at least [***] in advance and shall be conducted during Pyxis's normal business hours and otherwise in a manner that minimizes any interference to Pyxis's business operations.

7.3. Audit Fees and Expenses. Pfizer shall bear any and all fees and expenses it may incur in connection with any such audit of the Relevant Records; *provided*, *however*, in the event an audit reveals an underpayment by Pyxis of more than [***] as to the period subject to the audit, Pyxis shall reimburse Pfizer for any reasonable and documented out-of-pocket costs and expenses of the audit within [***] after receiving invoices thereof, and notwithstanding the provisions of Section 7.2, Pfizer shall have the right to examine the Relevant Records of Pyxis up to once every [***] for the [***] year period following the audit revealing such underpayment.

7.4. Payment of Deficiency. If any audit establishes that Pyxis underpaid any amounts due to Pfizer under this Agreement, then Pyxis shall pay Pfizer any such deficiency within [***] after receipt of written notice thereof. For the avoidance of doubt, such payment will be considered a late payment, subject to Section 6.10.

8. INTELLECTUAL PROPERTY RIGHTS.

8.1. Pre-existing IP. Subject only to the rights expressly granted to the other Party under this Agreement, each Party shall retain all rights, title and interests in and to any Intellectual Property Rights that are owned, licensed or sublicensed by such Party prior to or independent of this Agreement.

8.2. Patent Prosecution.

8.2.1. Patent Prosecution and Maintenance. Subject to Pfizer's rights set forth in Section 8.2.2 below, and immediately upon Pfizer's transfer of the documentation related to the Licensed ADC Patent Rights in accordance with Schedule 4, Pyxis will be responsible for filing, prosecuting (including in connection with any reexaminations, oppositions and the like) and maintaining the Licensed ADC Patent Rights in the Territory and in Pfizer's name at Pyxis's own cost and expense using lead patent counsel and annuity service provider, each to be identified by Pyxis in writing to Pfizer on or prior to the Effective Date, to prepare, file, prosecute and maintain the Licensed ADC Patent Rights. Pyxis will select additional qualified patent counsel and foreign agents as necessary, in each case reasonably acceptable to Pfizer, within [***] after the Effective Date. During the Term, Pyxis will provide notice of any substitution of such counsel, foreign agents or annuity service within [***] after such substitution. Before each submission is filed,

Pyxis will provide Pfizer a reasonable opportunity to review and comment on proposed submissions to any patent office and reasonably consider any comments provided by Pfizer to Pyxis. Pyxis will keep Pfizer reasonably informed of the status of the Licensed ADC Patent Rights by timely providing Pfizer copies of significant communications relating to such Licensed ADC Patent Rights that are received from any patent office or patent counsel of record or foreign associate. Pfizer will continue to file, prosecute and maintain the Licensed Platform Patent Rights.

8.2.2. Assistance. Pfizer will provide reasonable assistance to Pyxis, at Pyxis's expense, in connection with the filing, prosecution and maintenance of the Licensed ADC Patent Rights, where such assistance shall include providing access to relevant persons and executing documentation reasonably requested by Pyxis.

8.2.3. Failure to Prosecute or Maintain. In the event Pyxis elects to forgo filing, prosecution or maintenance of the Licensed ADC Patent Rights, Pyxis shall notify Pfizer of such election at least [***] prior to any filing or payment due date, or any other due date that requires action ("**Election Notice**"). Upon receipt of an Election Notice, Pfizer shall be entitled, upon written notice to Pyxis, at its sole discretion and expense, to file or to continue the prosecution or maintenance of such Patent Right in such country in Pfizer's name using counsel of its own choice and at its own expense, in which case, as of the date Pyxis provides Pfizer such Election Notice, the license granted in Section 3.1.1 with respect to such patent rights shall become non-exclusive and non-sublicensable (to the extent Pyxis has not sublicensed such Patent Right prior to providing such Election Notice), and Pyxis will have no further rights in respect of the filing, maintenance or enforcement of such Patent Right.

9. INFRINGEMENT; MISAPPROPRIATION.

9.1. Notification. Each Party will promptly notify the other Party in writing of any actual or threatened infringement, misappropriation or other violation by a Third Party of any Licensed ADC Technology or Licensed Platform Technology in the Field and in the Territory of which it becomes aware ("**Third Party Infringement**").

9.2. Infringement Action.

9.2.1. Right of First Enforcement.

(a) Pyxis shall have the first right (but not the obligation), at its own expense, to control enforcement of the Licensed ADC Patent Rights against any Third Party Infringement within the scope of its exclusive license and may name Pfizer as a party for standing purposes. Prior to commencing any such action, Pyxis shall consult with Pfizer and shall give due consideration to Pfizer's recommendations regarding the proposed action. Pyxis shall give Pfizer timely notice of any proposed settlement of any such action instituted by Pyxis and shall not, without the prior written consent of Pfizer, enter into any settlement that would: (i) adversely affect the validity, enforceability or scope of any of the Licensed ADC Patent Rights, (ii) give rise to liability of Pfizer or its Affiliates, (iii) admit non-infringement of any Licensed ADC Patent Rights, or (iv) otherwise impair Pfizer's rights in any Licensed ADC Technology, Licensed Platform Technology or this Agreement.

(b) If Pyxis does not, with respect to its first right of enforcement under Section 9.2.1(a), obtain agreement from the alleged infringer to desist or fails or refuses to initiate an infringement action by the earlier of (i) [***] following Pyxis's receipt of notice of the alleged infringement, or (ii) [***] before the expiration date for filing such actions, then Pfizer shall have the right, at its sole discretion, to control such enforcement of the Licensed ADC Patent Rights at its sole expense.

(c) Pfizer will have the sole right, but not the obligation to control enforcement of the Licensed Platform Patent Rights against any Third Party Infringement.

9.2.2. Recoveries. Any recoveries resulting from an action relating to a claim of Third Party Infringement shall first be applied to reimburse each Party's costs and expenses incurred in connection therewith. Any remaining recoveries shall be retained by (or if received by Pfizer, paid to) Pyxis; *provided*, *however*, Pfizer shall be entitled to a Royalty on such remaining recoveries of [***]. If Pyxis fails to institute an action or proceeding and Pfizer exercises its right to prosecute such infringement pursuant to Section 9.2.1(b), any remaining recoveries shall be retained by Pfizer.

10. CONFIDENTIALITY.

10.1. Definition. "**Confidential Information**" of a Party means the existence, terms and provisions of this Agreement and all other proprietary information and data of a financial, commercial or technical nature that the disclosing Party or any of its Affiliates has supplied or otherwise made available to the other Party or its Affiliates, which are disclosed in writing or, if disclosed orally or visually, summarized in writing and provided to the receiving Party after disclosure. All Licensed ADC Know-How and Licensed Platform Know-How shall be considered Pfizer's Confidential Information. Confidential Information shall not include information that: (a) is, at the time of disclosure or becomes, after the time of disclosure, known to the public or part of the public domain through no breach of this Agreement by the receiving Party or any Recipients to whom it disclosed such information; (b) was known to, or was otherwise in the possession of, the receiving Party prior to the time of disclosure by the disclosing Party; (c) is disclosed to the receiving Party on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation to the disclosing Party; or (d) is independently developed by or on behalf of the receiving Party or any of its Affiliates, as evidenced by its written records, without use or access to the Confidential Information.

10.2. Obligations. The receiving Party will protect all Confidential Information against unauthorized disclosure to Third Parties with the same degree of care as the receiving Party uses for its own similar information, but in no event less than a reasonable degree of care. The receiving Party may disclose the Confidential Information to its Affiliates, and their respective directors, officers, employees, subcontractors, current and prospective sublicensees, consultants, attorneys, accountants, banks and investors (collectively, "**Recipients**") who have a need to know such information for purposes related to this Agreement, *provided* that the receiving Party shall hold such Recipients to written obligations of confidentiality with terms and conditions at least as restrictive as those set forth in this Agreement. All obligations of confidentiality under this Agreement shall survive expiration or termination of this Agreement for a period of [***] years.

10.3. Exceptions.

10.3.1. Disclosure Required by Law. The restrictions set forth in this Article 10 shall not apply to any Confidential Information that the receiving Party is required to disclose under Applicable Laws or a court order or other governmental order, *provided* that the receiving Party: (a) provides the disclosing Party with prompt notice of such disclosure requirement if legally permitted, (b) affords the disclosing Party an opportunity to oppose, limit or secure confidential treatment for such required disclosure and (c) if the disclosing Party is unsuccessful in its efforts pursuant to subsection (b), discloses only that portion of the Confidential Information that the receiving Party is legally required to disclose as advised by the receiving Party's legal counsel.

10.3.2. Disclosure to Assignee of Payments. In the event that Pfizer wishes to assign, pledge or otherwise transfer its rights to receive some or all of the Milestone Payments, Royalties, Sublicensing Income payments or Transaction Completion Payment payable hereunder, Pfizer may disclose to a Third Party Confidential Information of Pyxis in connection with any such proposed assignment; *provided* that Pfizer shall hold such Third Parties to written obligations of confidentiality and non-use with terms and conditions at least as restrictive as those set forth in this Agreement.

10.4. Right to Injunctive Relief. Pyxis agrees that breaches of this Section 10 may cause irreparable harm to Pfizer and shall entitle Pfizer, in addition to any other remedies available to it (subject to the terms of this Agreement), the right to seek injunctive relief enjoining such action.

10.5. Ongoing Obligation for Confidentiality. Upon expiration or termination of this Agreement, the receiving Party shall, and shall cause its Recipients to, destroy or return (as requested by the disclosing Party) any Confidential Information of the disclosing Party, except that the receiving Party (a) may retain a single copy of Confidential Information for the sole purpose of ascertaining its rights and responsibilities in respect of such information and (b) shall not be required to destroy any computer files stored securely by the receiving Party that are created by automatic system back up.

11. REPRESENTATIONS, WARRANTIES AND COVENANTS.

11.1. Representations and Warranties by Each Party. Each Party represents and warrants to the other Party as of the Execution Date that:

11.1.1. it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

11.1.2. it has full corporate power and authority to execute, deliver, and perform under this Agreement, and has taken all corporate action required by Applicable Law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

11.1.3. this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms;

11.1.4. all consents, approvals and authorizations from all Governmental Authorities or other Third Parties required to be obtained by such Party in connection with this Agreement have been obtained; and

11.1.5. the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby do not and shall not: (i) conflict with or result in a breach of any provision of its organizational documents, (ii) result in a breach of any agreement to which it is a party that would impair the performance of its obligations hereunder; or (iii) violate any Applicable Law.

11.2. Representations and Warranties by Pfizer. Pfizer represents and warrants to Pyxis as of the Execution Date and the Effective Date that:

11.2.1. to its Knowledge, Pfizer has the right to grant right, title and interest in the licenses and other rights granted to Pyxis under this Agreement;

11.2.2. to Pfizer's Knowledge, there is no ongoing or threatened claim, or litigation involving the Licensed ADC Technology or Licensed Platform Technology.

11.3. Representations, Warranties and Covenants by Pyxis.

11.3.1. Pyxis represents and warrants to Pfizer as of the Effective Date that it has the financial and commercial capabilities to Develop and Commercialize the Agreement ADCs and Products in accordance with Section 5.2 and perform its other obligations in accordance with this Agreement and in compliance with all Applicable Laws, and Pyxis covenants that it shall continue to maintain such capabilities during the Term of the Agreement.

11.3.2. Pyxis covenants to Pfizer that it shall comply with all Applicable Law with respect to the performance of its obligations hereunder.

11.4. Representations, Warranties and Covenants related to Compliance Laws. Without limiting the generality of Section 11.3.2, Pyxis shall comply with the U.S. Foreign Corrupt Practices Act and any other applicable anti-bribery or anti-corruption laws ("**Compliance Laws**"). Pyxis represents and warrants that neither Pyxis, nor its respective Affiliates, nor to Pyxis's knowledge, any director, officer, employee, consultant, agent or representative or other person acting on its behalf has taken or will take any action, directly or indirectly, to pay, offer, promise or authorize the payment, or giving of anything of value to any Government Official, or to any person, and has not accepted and will not accept a payment for any item of value: (a) for the purpose of (i) influencing any act or decision of such Government Official(s) in their official capacity, including the failure to perform an official function, in order to assist Pyxis or its Affiliates or any beneficiary of the Pyxis in obtaining or retaining business, or directing business to any third party, (ii) securing an improper advantage, (iii) inducing such Government Official(s) to use their influence to affect or influence any act or decision of a government entity in order to assist Pyxis, its Affiliates or any beneficiary of Pyxis in obtaining or retaining business, or directing business to any third party, or (v) providing an unlawful personal gain or benefit, of financial or other value, to such Government Official(s); or (b) otherwise for the benefit of Pyxis, or any of its Affiliates in violation of any federal, state, local, municipal, foreign, international, multinational or other administrative law.

11.5. No Action Required Which Would Violate Law. In no event shall Pfizer be obligated under this Agreement to take any action or omit to take any action that Pfizer believes, in good faith, would cause Pfizer to violate any Applicable Law, including without limitation the Compliance Laws.

11.6. No Other Warranties. EXCEPT AS EXPRESSLY STATED IN THIS ARTICLE 11, NEITHER PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES OF TITLE, NON-INFRINGEMENT, VALIDITY, ENFORCEABILITY, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ANY INFORMATION, KNOW-HOW OR MATERIALS PROVIDED BY PFIZER OR ITS AFFILIATES IS MADE AVAILABLE ON AN "AS IS" BASIS WITHOUT WARRANTY WITH RESPECT TO COMPLETENESS, COMPLIANCE WITH REGULATORY STANDARDS OR REGULATIONS OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER KIND OF WARRANTY WHETHER EXPRESS OR IMPLIED.

12. INDEMNIFICATION.

12.1. Indemnification by Pyxis. Pyxis agrees to indemnify, hold harmless and defend Pfizer and its Affiliates, and their respective officers, directors, employees, contractors, agents and assigns, from and against any Claims arising or resulting from: (a) the Development of a Product by Pyxis, its Affiliates, subcontractors or sublicensees, (b) the Commercialization of a Product by Pyxis, its Affiliates, subcontractors or sublicensees, (c) the negligence, recklessness or wrongful intentional acts or omissions of Pyxis, its Affiliates, subcontractors or sublicensees, (d) breach by Pyxis of any representation, warranty or covenant as set forth in this Agreement or (e) breach by Pyxis of the scope of the license set forth in Section 3.1.

12.2. Indemnification Procedure. In connection with any Claim for which Pfizer seeks indemnification from Pyxis pursuant to this Agreement, Pfizer shall: (a) give Pyxis prompt written notice of the Claim; *provided*, *however*, that failure to provide such notice shall not relieve Pyxis from its liability or obligation hereunder, except to the extent of any material prejudice as a direct result of such failure; (b) cooperate with Pyxis, at Pyxis's expense, in connection with the defense and settlement of the Claim; and (c) permit Pyxis to control the defense and settlement of the Claim; *provided*, *however*, that Pyxis may not settle the Claim without Pfizer's prior written consent, which shall not be unreasonably withheld or delayed, in the event that such settlement materially adversely impacts Pfizer's rights or obligations. Further, Pfizer shall have the right to participate (but not control) and be represented in any suit or action by advisory counsel of its selection and at its own expense.

13. LIMITATION OF LIABILITY.

13.1. No Consequential Damages. EXCEPT FOR (A) A BREACH OF ARTICLE 10 OR OBLIGATIONS ARISING UNDER ARTICLE 12 OR (B) A PARTY'S GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING DAMAGES FOR LOST PROFITS OR LOST REVENUES REGARDLESS OF WHETHER IT HAS BEEN INFORMED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES OR THE TYPE OF CLAIM, CONTRACT OR TORT (INCLUDING NEGLIGENCE).

13.2. Liability Cap. EXCEPT FOR (A) A BREACH OF ARTICLE 10 OR OBLIGATIONS ARISING UNDER ARTICLE 12 OR (B) PFIZER'S GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD, IN NO EVENT SHALL PFIZER'S LIABILITY FOR DAMAGES IN CONNECTION WITH THIS AGREEMENT EXCEED THE CAP, REGARDLESS OF WHETHER PFIZER HAS BEEN INFORMED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES OR THE TYPE OF CLAIM, CONTRACT OR TORT (INCLUDING NEGLIGENCE). "**Cap**" means [***]

14. TERM; TERMINATION.

14.1. Term. The term of this Agreement ("**Term**") shall commence as of the Execution Date and shall expire upon (i) [***] or (ii) the last-to-expire Royalty Term [***].

14.2. Termination for Cause. Each Party shall have the right, without prejudice to any other remedies available to it at law or in equity, to terminate this Agreement in the event the other Party materially breaches any of its obligations hereunder and fails to cure such breach within [***] of receiving notice thereof; *provided*, *however*, if such breach is capable of being cured, but cannot be cured within such [***] period, and the breaching Party initiates actions to cure such breach within such period and thereafter diligently pursues such actions, the breaching Party shall have such additional period as is reasonable to cure such breach, but in no event will such additional period exceed [***]. Any termination by a Party under this Section 14.2 shall be without prejudice to any damages or other legal or equitable remedies to which it may be entitled from the other Party. For the avoidance of doubt, Pyxis's failure to use Commercially Reasonable Efforts to Develop and Commercialize a Product or failure to make a Milestone Payment, Royalty payment, Sublicensing Income payment or Transaction Completion Payment shall constitute a material breach by Pyxis under this Agreement. Without limiting the foregoing, Pfizer may, at any time, terminate this Agreement immediately upon written notice in the event that Pfizer concludes, in its sole opinion, that Pyxis has breached any of the representations or warranties in Section 11.4 of this Agreement or otherwise failed to meet its obligations under Section 11.4 of this Agreement.

14.3. Termination for a Bankruptcy Event. Each Party shall have the right to terminate this Agreement in the event of a Bankruptcy Event with respect to the other Party.

14.4. Termination for Convenience. Prior to receipt of the first Regulatory Approval of a Product, Pyxis shall have the right to terminate this Agreement in its entirety or with respect to a given Licensed Target or Product for convenience upon [***] prior written notice to Pfizer; *provided* that upon receipt of the first Regulatory Approval of the first Product and continuing through the end of the Term, Pyxis shall have the right to terminate this Agreement in its entirety or with respect to a given Licensed Target or Product (the "**Terminated Product**") for convenience upon [***] prior written notice to Pfizer.

14.5. Effects of Termination.

14.5.1. Termination by Pyxis for Cause or Bankruptcy Event. In the event that Pyxis terminates this Agreement pursuant to Section 14.2 or Section 14.3, the following shall apply:

(a) **Rights and Obligations**. Except as otherwise provided herein, all rights and obligations of each Party hereunder shall cease, including, subject to Section 14.5.1(b), the licenses granted to Pyxis pursuant to Section 3.1.

(b) **Pyxis Inventory**. Pyxis shall have the right to sell its remaining inventory of Product so long as Pyxis has fully paid, and continues to pay when due, all Royalties, Milestone Payments, Transaction Completion Payments and Sublicensing Income payments owed to Pfizer, and Pyxis is otherwise not in material breach of this Agreement.

14.5.2. Termination by Pfizer for Cause, Bankruptcy Event; Termination by Pyxis for Convenience. In the event that Pfizer terminates this Agreement pursuant to Section 14.2, Section 14.3, or Pyxis terminates this Agreement pursuant to Section 14.4, in whole or in part, the following shall apply (except that if such termination is as to less than this Agreement in its entirety, the following shall apply only to the Terminated Product):

(a) **Rights and Obligations**. Except as otherwise provided herein, all rights and obligations of each Party hereunder shall cease; *provided* that if such termination is as to as to less than this Agreement in its entirety, only those rights and obligations related to such Terminated Product shall terminate and all other rights and obligations shall continue in accordance with their terms.

(b) **Licenses**. Pfizer shall have a perpetual, irrevocable, worldwide, fully-paid up, royalty-free exclusive right and license, with the right to grant sublicenses, under the Developed IP, as it exists as of the effective date of termination, to use, have used, Develop, have Developed, Manufacture, have Manufactured, Commercialize, have Commercialized and otherwise exploit the applicable Agreement ADCs and Products then Pfizer shall be obligated to pay Pyxis royalties [***] of the royalty rates set forth in Section 6.6 on Net Sales of such Products that are sold on or after the effective date of termination by Pyxis, its Affiliates or its Sublicensees that are covered by the Developed IP.

(c) **Transition**. During the notice period provided in Section 14.2 or Section 14.4, as applicable to such termination, or as soon as practicable upon notice of termination pursuant to Section 14.3, at Pfizer's sole option, Pfizer shall prepare and the Parties shall negotiate a transition plan that will include, at a minimum, a plan for accomplishing the activities described in this Section 14.5.2(c).

(i) **Continued Development**. At Pfizer's request and expense, Pyxis shall continue on-going Development of the applicable Agreement ADCs and Products for a mutually agreed-upon period following terminating of this Agreement, which period shall not be less than [***] unless otherwise agreed to by the Parties. For avoidance of doubt, if Pfizer chooses not to continue a clinical trial initiated by Pyxis that is the subject of termination, Pyxis shall be solely responsible for the cost of winding down such clinical trial, including compliance with any ethical or other requirements imposed by an applicable Regulatory Authority.

(ii) **Technology Transfer**. At Pfizer's request, Pyxis shall make available to Pfizer all currently available records and data which exist and are Controlled by Pyxis as of the effective date of termination and are necessary or useful for Pfizer to continue using, Developing, Commercializing, Manufacturing and otherwise exploiting the applicable Agreement ADCs and Products.

(iii) **Regulatory Matters**. At Pfizer's request, Pyxis shall transfer and assign to Pfizer (or its designee) all Regulatory Approvals, pricing approvals and Regulatory Filings held by Pyxis with respect to each applicable Agreement ADC and Product, *provided* that if such transfer and assignment is not permitted by the applicable Regulatory Authority, Pyxis shall permit Pfizer to cross-reference and rely upon such Regulatory Approvals, pricing approvals and Regulatory Filings. Pyxis shall make available to Pfizer copies of all regulatory documentation and records related to the Product, including information contained in the regulatory and safety databases. The Parties shall cooperate to ensure the prompt transition of regulatory responsibilities for each applicable Agreement ADC and Product from Pyxis to Pfizer.

(iv) **Trademarks**. Pfizer shall have a fully paid-up, royalty-free, worldwide, transferable, sublicensable, perpetual and irrevocable license to use the trademarks associated with each Product for the purpose of using, Developing, Commercializing, Manufacturing and otherwise exploiting each applicable Agreement ADC and Product. Pfizer shall have a transitional license to use Pyxis's trademarks and promotional materials solely for the purpose of using, Developing, Commercializing, Manufacturing and otherwise exploiting each applicable Agreement ADC and Product.

(v) **Inventory and Supply**. At Pfizer's request, Pyxis shall transfer to Pfizer (or its designee) all applicable Agreement ADCs and Products, components and in-process inventory produced or held by Pyxis with respect to the Manufacture of applicable Agreement ADCs and Products. At Pfizer's request, if Pyxis has sublicensed to a CMO to Manufacture the applicable Agreement ADCs and Products, Pyxis promptly assign such sublicense to Pfizer, or if not, Pyxis shall continue to Manufacture or have Manufactured the applicable Agreement ADCs and Products for a period of not less than [***], including, at Pfizer's request, a reasonable stock build. Pfizer shall pay to Pyxis [***].

(vi) **Third Party Agreements**. At Pfizer's request, to the extent Pyxis is able to do so, Pyxis shall assign to Pfizer (or its designee) any agreements with Third Parties with respect to the Development, Commercialization and Manufacture of the applicable Products. With respect to Third Party agreements that Pyxis is not able to assign to Pfizer, Pyxis shall cooperate to give Pfizer the benefit of such contracts for a reasonable transitional period.

(d) **Pyxis Inventory**. In the event that Pyxis terminates this Agreement or a particular Terminated Product pursuant to Section 14.4 and Pfizer elects not to initiate transition activities pursuant to Section 14.5.2(c), Pyxis shall have the right to sell its remaining inventory of the applicable Products so long as Pyxis has fully paid, and continues to pay when due, all Royalties, Milestone Payments, Sublicensing Income payments or Transaction Completion Payments owed to Pfizer, and Pyxis is otherwise not in material breach of this Agreement.

14.6. Survival. Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing hereunder prior to such expiration or termination. Without limiting the foregoing, the provisions of Sections [7, 8.1, 10, 12, 13, 14.5, 16, 17, 18.3 and 18.8] shall survive expiration or termination of this Agreement.

15. PUBLICITY; PUBLICATIONS.

15.1. Use of Names. Subject to Pfizer's rights pursuant to Section 14.5.2(c)(iv), neither Party (nor any of its Affiliates or agents) shall use the registered or unregistered trademarks, service marks, trade dress, trade names, logos, insignia, domain names, symbols or designs of the other Party or its Affiliates in any press release, publication or other form of promotional disclosure without the prior written consent of the other Party in each instance.

15.2. Press Releases. The Parties acknowledge that one or both Parties, either singly or jointly, may desire to publish one or more press releases relating to this Agreement, the rights and licenses granted hereunder, and developments made thereto. However, each Party agrees not to issue any press release or other public statement, whether written, electronic, oral or otherwise, disclosing the existence of this Agreement, the terms hereof or any information relating to this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld or delayed. Neither Party will be prevented from complying with any duty of disclosure it may have pursuant to Applicable Law or the rules of any recognized stock exchange so long as the disclosing Party provides the other Party at least [***] prior written notice to the extent practicable and only discloses information to the extent required by Applicable Law or the rules of any recognized stock exchange.

15.3. Publications. During the Term, Pyxis shall submit to Pfizer for review and approval any proposed academic, scientific or medical publication or public presentation that contains Pfizer's Confidential Information. Such review and approval will be conducted for the purposes of preserving the value of the Licensed ADC Technology and Licensed Platform Technology and determining whether any portion of the proposed publication or presentation containing Pfizer's Confidential Information should be modified or deleted. Written copies of such proposed publication or presentation required to be submitted hereunder shall be submitted to Pfizer no later than [***] before submission for publication or presentation (the "**Review Period**"). Pfizer shall provide its comments with respect to such publications and presentations within [***] of its receipt of such written copy. The Review Period may be extended for an additional [***] in the event Pfizer can, within [***] of receipt of the written copy, demonstrate reasonable need for such extension including for the preparation and filing of patent applications. Pyxis will comply with standard academic practice regarding authorship of scientific publications and recognition of contribution of other parties in any publication governed by this Section 15.3, including International Committee of Medical Journal Editors standards regarding authorship and contributions.

16. PYXIS INSURANCE.

16.1. Insurance Requirements. Pyxis will maintain during the Term and until the later of: (a) three (3) years after termination or expiration of this Agreement, or (b) the date that all statutes of limitation covering claims or suits that may be instituted for personal injury based on the sale or use of the Product have expired, commercial general liability insurance from a minimum "A-" AM Bests rated insurance company, including contractual liability and product liability or clinical trials, if applicable, with coverage limits of not less than [***] per occurrence and [***] in the aggregate. Pyxis has the right to provide the total limits required by any combination of primary and umbrella/excess coverage. The minimum level of insurance set forth herein shall not be construed to create a limit on Pyxis's liability hereunder. Such policies shall name Pfizer and its Affiliates as additional insured (usually for US, Canada and Puerto Rico exposures) or indemnify Pfizer and its Affiliates, as principal (usually for rest of world exposures) and provide a waiver of subrogation in favor of Pfizer and its Affiliates. Such insurance policies shall be primary and non-contributing with respect to any other similar insurance policies available to Pfizer or its Affiliates. Any deductibles for such insurance shall be assumed by Pyxis.

16.2. Policy Notification. Pyxis shall provide Pfizer with certified copies of such policies or original certificates of insurance evidencing such insurance: (a) prior to execution by both Parties of this Agreement, and (b) prior to expiration of any one coverage. Pyxis shall provide that Pfizer shall be given at least [***] written notice prior to cancellation, termination or any material change to restrict the coverage or reduce the limits afforded.

17. DISPUTE RESOLUTION.

17.1. Arbitration.

17.1.1. General. Any disputes, controversies or other claims arising out of this Agreement, its interpretation, validity, performance, enforceability, breach or termination ("**Disputes**") that are not settled amicably shall be referred by sending written notice of the Dispute to the other Party for final and binding arbitration with the office of the American Arbitration Association in New York County, New York in accordance with the then-prevailing commercial arbitration rules of the American Arbitration Association.

17.1.2. Number of Arbitrators. The arbitration shall be settled by one (1) arbitrator who is neutral to the Parties, and the Parties shall endeavor to jointly appoint the arbitrator. If the Parties fail to jointly appoint the arbitrator within [***] of the arbitration being initiated, the appointment shall be made by the American Arbitration Association.

17.1.3. Powers of the Arbitrator.

(a) The arbitrator is authorized to award to the prevailing Party, if a prevailing party is determined by the arbitrator, such Party's costs and expenses, including attorneys' fees.

(b) The arbitrator may not award punitive, exemplary, or consequential damages, nor may the arbitrator apply any multiplier to any award of actual damages, except as may be required by statute.

(c) The arbitrator shall have the discretion to hear and determine at any stage of the arbitration any issue asserted by any Party to be dispositive of any claim or counterclaim, in whole or part, in accordance with such procedure as the arbitrator may deem appropriate, and the arbitrator may render an award on such issue.

(d) In addition to the authority conferred on the arbitrator by the rules designated in this Agreement, and without prejudice to any provisional measures that may be available from a court of competent jurisdiction, the arbitrator shall have the power to grant any provisional measures that the arbitrator deems appropriate, including but not limited to provisional injunctive relief, and any provisional measures ordered by the arbitrator may, to the extent permitted by Applicable Law, be deemed to be a final award on the subject matter of the measures and shall be enforceable as such.

17.1.4. Confidentiality. No information concerning an arbitration, beyond the names of the parties and the relief requested, may be unilaterally disclosed to a Third Party by any Party unless required by Applicable Law. Any documentary or other evidence given by a Party or witness in the arbitration shall be treated as confidential by any Party whose access to such evidence arises exclusively as a result of its participation in the arbitration, and shall not be disclosed to any Third Party (other than a witness or expert), except as may be required by Applicable Law.

17.2. No Trial By Jury. THE PARTIES EXPRESSLY WAIVE AND FOREGO ANY RIGHT TO TRIAL BY JURY.

18. GENERAL PROVISIONS.

18.1. Assignment. Neither Party may assign its rights and obligations under this Agreement without the other Party's prior written consent, except that: (a) Pfizer may assign to a Third Party its rights to receive some or all of the payments payable hereunder, (b) each Party may assign its rights and obligations under this Agreement or any part hereof to one or more of its Affiliates without the consent of the other Party; and (c) either Party may assign this Agreement in the event of a Change of Control of such Party or a sale, transfer or disposition of all or substantially all of the assets or business of such Party to which this Agreement relates. The assigning Party shall provide the other Party with prompt written notice of any such assignment. Any permitted assignee pursuant to clauses (b) and (c) above shall assume all obligations of its assignor under this Agreement, and no permitted assignment shall relieve the assignor of liability for its obligations hereunder. Any attempted assignment in contravention of the foregoing shall be void.

18.2. Severability. Should one or more of the provisions of this Agreement become void or unenforceable as a matter of law, then such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement, and the Parties agree to substitute a valid and enforceable provision therefor which, as nearly as possible, achieves the desired economic effect and mutual understanding of the Parties under this Agreement.

18.3. Governing Law. This Agreement shall be governed by and construed under the laws in effect in the State of New York, U.S. without giving effect to any conflicts of laws provision thereof or of any other jurisdiction that would produce a contrary result. Article 17 does not intend to deprive any New York court of competent jurisdiction with respect to its power to issue a pre-arbitral injunction, pre-arbitral attachment or other order in aid of arbitration proceedings or the enforcement of any judgment or award. In any such action, the courts of New York shall have exclusive jurisdiction over any action brought to enforce this Agreement, and each of the Parties hereto irrevocably: (a) submits to such exclusive jurisdiction for such purpose; (b) waives any objection which it may have at any time to the laying of venue of any proceedings brought in such courts; (c) waives any claim that such proceedings have been brought in an inconvenient forum, (d) further waives the right to object with respect to such proceedings that any such court does not have jurisdiction over such Party, and (e) consents to service of process in the manner provided by Section 18.8 or by first class certified mail, return receipt requested, postage prepaid.

18.4. Force Majeure. Except with respect to delays or nonperformance caused by the negligent or intentional act or omission of a Party, any delay or nonperformance by such Party (other than payment obligations under this Agreement) will not be considered a breach of this Agreement to the extent such delay or nonperformance is caused by acts of God, natural disasters, acts of the government or civil or military authority, fire, floods, epidemics, pandemics, quarantine, energy crises, war or riots or other similar cause outside of the reasonable control of such Party (each, a "**Force Majeure Event**"), *provided* that the Party affected by such Force Majeure Event will promptly begin or resume performance as soon as reasonably practicable after the event has abated. If the Force Majeure Event prevents a Party from performing any of its obligations under this Agreement for [***] or more, then the other Party may terminate this Agreement immediately upon written notice to the non-performing Party.

18.5. Waivers and Amendments. The failure of any Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other Party. No waiver shall be effective unless it has been given in writing and signed by the Party giving such waiver. No provision of this Agreement may be amended or modified other than by a written document signed by authorized representatives of each Party.

18.6. Relationship of the Parties. Nothing contained in this Agreement shall be deemed to constitute a partnership, joint venture, or legal entity of any type between Pfizer and Pyxis, or to constitute one Party as the agent of the other. Moreover, each Party agrees not to construe this Agreement, or any of the transactions contemplated hereby, as a partnership for any tax purposes. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give any Party the power or authority to act for, bind, or commit the other Party.

18.7. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns.

18.8. Notices. All notices, consents, waivers, and other communications under this Agreement must be in writing and will be deemed to have been duly given when: (a) delivered by hand (with written confirmation of receipt), (b) sent by fax (with written confirmation of receipt), *provided* that a copy is sent by an internationally recognized overnight delivery service (receipt requested), or (c) when received by the addressee, if sent by an internationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and fax numbers set forth below (or to such other addresses and fax numbers as a Party may designate by written notice):

If to Pfizer:
Pfizer Inc.
235 East 42nd Street
New York, NY 10017
Fax: [***]
Attention: [***]

If to Pyxis:

Pyxis Oncology, Inc.
35 Cambridgepark Dr.
Cambridge, MA 02140
Attention: Chief Executive Officer

18.9. Further Assurances. Pyxis and Pfizer hereby covenant and agree without the necessity of any further consideration, to execute, acknowledge and deliver any and all such other documents and take any such other action as may be reasonably necessary or appropriate to carry out the intent and purposes of this Agreement.

18.10. No Third Party Beneficiary Rights. This Agreement is not intended to and shall not be construed to give any Third Party any interest or rights (including, without limitation, any third party beneficiary rights) with respect to or in connection with any agreement or provision contained herein or contemplated hereby.

18.11. Entire Agreement; Confidentiality Agreements.

18.11.1. This Agreement, together with its Schedules, sets forth the entire agreement and understanding of the Parties as to the subject matter hereof and supersedes all proposals, oral or written, and all other prior communications between the Parties with respect to such subject matter, including, without limitation, (a) that certain Confidential Disclosure Agreement, by and between the Parties, [***] (the "**CDAs**"). The Parties acknowledge and agree that, as of the Execution Date, all Confidential Information (as defined in the CDAs) disclosed by Pfizer or its Affiliates pursuant to the CDAs shall be considered Pfizer's Confidential Information and subject to the terms set forth in this Agreement.

18.11.2. In the event of any conflict between a material provision of this Agreement and any Schedule hereto, the Agreement shall control.

18.12. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

18.13. Cumulative Remedies. No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

18.14. Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, any rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

[Signature page to follow]

IN WITNESS WHEREOF, the Parties intending to be bound have caused this Agreement to be executed by their duly authorized representatives as of the Execution Date.

PYXIS ONCOLOGY INC.

By: /s/ Lara Sullivan
Name: Lara Sullivan
Title: CEO

PFIZER INC.

By: /s/ Uwe Schoenbeck
Name: Uwe Schoenbeck
Title: CSO, SVP Ext Science & Innovation

SCHEDULE 1.59: KNOWLEDGE

[***]

SCHEDULE 1.60: LICENSED ADC KNOW-HOW

[***]

SCHEDULE 1.63: LICENSED PLATFORM KNOW-HOW

[***]

SCHEDULE 1.61: LICENSED ADC PATENT RIGHTS

[***]

SCHEDULE 1.64: LICENSED PLATFORM PATENT RIGHTS

[***]

SCHEDULE 1.66: LICENSED TARGETS

[***]

SCHEDULE 4: TRANSFER ACTIVITIES

[***]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

Amendment No. 1 to Agreement
("Amendment No. 1")

Amendment No. 1 Date:	March 22, 2021
Name of Original Agreement:	License Agreement (the "Original Agreement," and together with any previous amendments which may be described below, the "Agreement")
Execution Date of Original Agreement:	December 7, 2020 ("Execution Date")
Parties:	Pfizer Inc. ("Pfizer") and Pyxis Oncology Inc. ("Pyxis")
Dates of Previous Amendment(s):	None

WHEREAS, the parties hereto desire to amend, among other things, certain terms of the Agreement including the schedules of Licensed ADC Know-How and Licensed Platform Know-how

NOW, THEREFORE, in order to accommodate the desired amendment(s), the parties hereby agree as follows:

1. Defined Terms. Capitalized terms used but not defined herein shall have the respective meanings ascribed to such terms in the Agreement.

2. Amendment(s) to the Agreement.

   2.1. Schedule 1.60, entitled Licensed ADC Know-How and Schedule 1.63, entitled Licensed Platform Know-How are hereby amended and restated in their entirety as set forth in Annex 1(a) and Annex 1(b), respectively, to include additional items that were added to the Due Diligence folder from the Intrallinks Data Room maintained by Pfizer (the "**Data Room**") following the Execution Date of the Agreement but prior to the Effective Date of the Agreement (the "**Additional Files**"), as described in the index attached as Annex 2.

   2.2. The Parties intend that (i) Additional Files related to EDB and CD123 are Licensed ADC Know-How for purposes of the License Grant set forth in Section 3.1.2 of the Agreement and that (ii) the Additional Files related to the Platform are Licensed Platform Know-How for purposes of the License Grant set forth in Section 3.1.3 of the Agreement. Notwithstanding the foregoing, the Parties acknowledge Additional Files have not been specifically identified in the Data Room as Licensed ADC Know-How or Licensed Platform Know-How, and have been provided without any prior review or analysis by Pyxis to determine the applicability of such Additional Files. Pyxis will use commercially reasonable efforts to ensure that it allocates such Additional Files according to the first sentence of this Amendment.

3. Ratification of the Agreement. Except as expressly set forth in Article 2 above, the Agreement shall remain unmodified and in full force and effect. The execution, delivery and effectiveness of this Amendment No. 1 shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of the parties to the Agreement, nor constitute a waiver of any provision of the Agreement. In the event of a conflict between the terms of this Amendment No. 1 and the Agreement, the terms of this Amendment No. 1 shall control.

4. Miscellaneous. This Amendment No. 1, together with the Agreement, constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes all negotiations, representations, prior discussions and preliminary agreements between the Parties relating to the subject matter of this Amendment No. 1 and the Agreement.

5. Counterparts. This Amendment No. 1 may be executed in any number of counterparts, each of which shall be an original instrument and all of which, when taken together, shall constitute one and the same agreement. Transmission by e-mail or other form of electronic transmission of an executed counterpart of this Letter shall be deemed to constitute due and sufficient delivery of such counterpart.

SIGNATURES IMMEDIATELY FOLLOWING ON NEXT PAGE

IN WITNESS WHEREOF, the duly authorized representatives of Pfizer and Pyxis have executed this Amendment No. 1 as of the date first above written.

Pyxis Oncology Inc.

By: /s/ Lara Sullivan
Print Name: Lara Sullivan
Title: President & CEO

Date: March 22, 2021
(Duly authorized)

Pfizer Inc.

By: /s/ Uwe Schoenbeck
Print Name: Uwe Schoenbeck
Title: CSO, SVP Ext Science & Innovation

Date: March 22, 2021
(Duly authorized)

Annex 1(a)

SCHEDULE 1.60: LICENSED ADC KNOW-HOW

[***]

Annex 1(b)

SCHEDULE 1.63: LICENSED PLATFORM KNOW-HOW

[***]

Annex 2

DATA ROOM INDEX

[***]

Exhibit 10.9

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

FINAL

EXCLUSIVE LICENSE AGREEMENT

BETWEEN THE UNIVERSITY OF CHICAGO AND PYXIS ONCOLOGY

FOR CANCER IMMUNOTHERAPY TECHNOLOGY

TABLE OF CONTENTS

EXCLUSIVE LICENSE AGREEMENT
BETWEEN THE UNIVERSITY OF CHICAGO AND PYXIS ONCOLOGY
FOR CANCER IMMUNOTHERAPY TECHNOLOGY

This License Agreement ("***Agreement***"), dated April 16th, 2020 (the "***Effective Date***"), is between The University of Chicago, an Illinois not-for-profit corporation ("***University***"), and Pyxis Oncology, Inc., a Delaware corporation, having an address 800 Boylston St, Boston, MA 02199 ("***Company***"). Each hereunder may be referred to separately as the "***Party***", or together as the "***Parties***".

WHEREAS, University has certain Licensed Patents and Technical Information arising from the disclosures entitled, "Therapeutic targets identified on dysfunctional TIL," further identified as UCHI 2650, "Beta-catenin inhibitors in cancer immunotherapy," further identified as UCHI 2381, and "Methods for Diagnosis and Treatment of Cancer Through Identification and Suppression of T-cell Anergy by way of the EGR2 Transcriptome," further identified as UCHI 2232, regarding the work of Thomas Gajewski, Jason Williams, Brendan Horton, Stefani Spranger, Robbert Spaapen, Yan Zheng, and Yuanyuan Zha, funded in part by the U.S. government;

WHEREAS, Company wishes to obtain an exclusive license under such Licensed Patents and access such Technical Information to diligently develop and commercialize Licensed Products; and

WHEREAS, University is willing to grant such rights in accordance with the terms and conditions of this Agreement to afford the public access to Licensed Products.

NOW, THEREFORE, for good and valuable consideration, the Parties agree as follows:

1. **Definitions**

The capitalized terms listed below and used in this Agreement will have the meanings set forth in this Section 1 ("***Defined Terms***"). A glossary of Defined Terms is included in Schedule H.

"***Affiliate***" means: (i) with respect to University, any corporation or other entity that directly or indirectly controls, is controlled by, or is under common control with, University where "control" means direct or indirect ownership of, or other beneficial interest in, fifty percent (50%) or more of the voting stock, other voting interest, or income of a corporation or other entity or the ability to direct the affairs of such other entity through contract rights or otherwise; and (ii) with respect to any entity other than University, any corporation or other entity that directly or indirectly controls, is controlled by, or is under common control with, such other entity, where "control" means direct or indirect ownership of, or other beneficial interest in, fifty percent (50%) or more of the voting stock, other voting interest, or income of a corporation or other entity or the ability to direct the affairs of such other entity through contract rights or otherwise, but any portfolio company of any stockholder of Company (which stockholder is a venture capital fund or private equity fund) shall be deemed not to be "under common control with" Company.

"***Calendar Quarter***" means each of the four, three-month periods ending on March 31st, June 30th, September 30th, or December 31st.

"***CDA***" means the Confidentiality and Non-Use Agreement between the Parties dated June 27, 2018.

"Change of Control" means an assignment of the Agreement to an unrelated third-party, a direct merger or other change in corporate structure where Company is not the surviving entity, a sale or transfer of the capital stock of Company representing more than fifty percent (50%) of the voting power of the stockholders of Company immediately prior to such sale. Notwithstanding the foregoing, a Change of Control shall not include a financing in which Company transfers more than fifty percent (50%) of the voting power of the stockholders to new equity holders (e.g., venture capital investors or other investors) who do not exercise direct control over day-to-day operations of Company.

"***Commence***" or "***Commencement***" means, with respect to any clinical trial, the first dosing of the first patient in such clinical trial.

"***Confidential Information***" has the meaning set forth in Schedule G.

"***Field***" means all fields.

"***First Commercial Sale***" means the first sale of a Licensed Product by a Licensed Entity to an unaffiliated third party (as defined in Section 9.P.xi) for consideration after receipt of regulatory approval for the sale of such Licensed Product in the relevant jurisdiction.

"***IND***" means an Investigational New Drug application, or similar application or submission, filed by Company or any other Licensed Entity for approval to conduct human clinical investigations filed with or submitted to a regulatory authority in conformance with the requirements of such regulatory authority.

"***Indication***" means (a) a cancerous condition resulting from a separate and distinct tumor type or (b) any non-cancerous condition, in each case of (a) or (b) for any size patient population and in each case of (a) or (b) subject to the following: (i) subtypes of the same disease or condition are not additional Indications; (ii) different symptom domains or domains of impairment of the same disease or condition are not additional Indications; (iii) the approved or potential use of any product for such disease in different combinations or co-therapies of treatments are not additional Indications (e.g., monotherapy vs. add-on or combination therapy with another agent in the same disease); (iv) treatment, prevention or cure of a disease or disease subtype each are not additional Indications; (v) the approved or potential use of any product for such disease in a different line of treatment or a different temporal position in a treatment algorithm for the same disease or condition are not additional Indications (e.g., first line vs. second line therapy in the same disease or condition); and (vi) treatment of the same disease or condition with any product in an expanded, narrowed, modified or additional patient population or for a different defined subset of patients with such disease or condition (or, with respect to cancer, cancer of the same tumor type) (e.g., elderly, or genetically defined patients subgroups (e.g., 17 p deletion CLL patients), etc.) are not additional Indications.

"***Licensed Entity***" means Company, an Affiliate of Company that has obtained a license under Section 2.A, or a Sublicensee.

K. "***Licensed Patents***" means (i) (A) the patents and patent applications listed on Schedule A attached hereto, and (B) except to the extent of any Licensed Entity's interest therein, the patents and patent applications claiming (1) [***] (2) [***] or (3) [***], (ii) all divisions, continuations, continuations-in-part or foreign counterparts of any of the foregoing, and (iii) any patents which may issue from any such patent applications in clause (i) or (ii), and any reexaminations, reissues, substitutions, extensions of or to or supplementary protection certificates referencing any of the foregoing patents or patent applications; provided, however, that "***Licensed Patents***" will not include any claims in continuations-in-part of any of the foregoing that are not fully supported under 35 U.S.C. §112(a) (except for the best mode requirement) by at least one of the patents or patent applications listed on Schedule A [***].

"***Licensed Product***" means:

(i) any product, device, system, article of manufacture, machine, composition of matter, process, or service (or component thereof);

(ii) any method of using any of the foregoing; or

(iii) any process for making any of the foregoing,

[***]:

(a)[***]

(b) [***]

(x) [***]

(y) [***]

(z) [***]

(c) [***]

(d) [***].

"***Materials***" means [***].

"***Net Sales***" means [***]:

A. [***];

B. [***]

C. [***];

D. [***]; and

E. [***].

i. [***].

ii. [***].

iii. [***].

iv. [***].

v. [***].

"***Non-Commercial Research Purposes***" means academic research or other not-for-profit scholarly purposes which are undertaken at a non-profit or government institution and publishing in connection therewith.

"***Option Agreement***" means the Option Agreement between the Parties dated July 13, 2018, as amended.

"***Phase I Clinical Trial***" means a human clinical trial, in any country, that would satisfy the requirements of 21 C.F.R. 312.21(a).

"***Phase II Clinical Trial***" means a human clinical trial, in any country, that would satisfy the requirements of 21 C.F.R. 312.21(b).

"***Phase III Clinical Trial***" means a human clinical trial, in any country, that would satisfy the requirements of 21 C.F.R. 312.21(c).

"***Royalty(ies)***" means all amounts payable under Section 3.B of this Agreement.

"***SRA***" means [***].

"***Sublicense***" means any agreement entered into by Company or another Licensed Entity with any third party pursuant to which: (i) any sublicense to the Licensed Patents or Technical Information is granted, including any sublicense rights to make, offer for sale, use, sell, or import Licensed Products; or (ii) Company covenants not to sue for the practice or use of any part of the Licensed Patents or Technical Information.

"***Sublicense Revenue***" means [***].

"***Sublicensee***" means any person, company, or other entity granted a Sublicense. A distributor who purchases a Licensed Product directly or indirectly from a Licensed Entity and does not need a license under the Licensed Patents or Technical Information to resell such Licensed Product is not a Sublicensee. For clarity, such purchase by such non-Sublicensee distributor from a Licensed Entity shall constitute a sale subject to Section 3.B to the extent consistent with Section 3.B.

"***Technical Information***" means [***]

"***Territory***" means worldwide.

"***Unique Target***" means [***].

"***Valid Claim***" means (i) an issued claim of any unexpired Licensed Patent or (ii) a claim of any pending Licensed Patent that, in each case of (i) or (ii), has not been held unenforceable, unpatentable, or invalid by a decision of a court or governmental body of competent jurisdiction in a ruling that is unappealable or unappealed within the time allowed for appeal and has not been disclaimed or admitted to be invalid or unenforceable through reissue, re-examination, disclaimer or otherwise; [***]

2. **Grant**

A. Grant.

Subject to the terms and conditions of this Agreement, University hereby grants to Company and, upon written notice from Company to University, to any applicable Affiliate of Company, and Company on behalf of itself and such of its Affiliates accepts:

i. an exclusive, royalty-bearing license under the Licensed Patents in the Field and Territory to make, have made, use, import, have sold, offer to sell and sell Licensed Products within the Field and within the Territory; and

ii. a nonexclusive, royalty-bearing (to the extent consistent with Section 3.B) license to use the Technical Information in the Field and Territory to discover, research, develop, make, have made, use, import, have sold, offer to sell and sell Licensed Products within the Field and within the Territory.

B. Possession of Technical Information.

i. [***]

ii. Technical Information is provided by University to Company solely for the use permitted in Section 2.A.ii or otherwise expressly provided in this Agreement, and nothing herein will be construed as constituting a sale thereof.

iv. Unless otherwise specified in writing by University, Licensed Entities shall maintain Technical Information as University's Confidential Information during and, (subject to Section 6 of Schedule G) after, the term of this Agreement in accordance with Schedule G (subject to Section 5 therein).

C. Ongoing Obligations of Former Affiliates.

While an entity is entitled to the benefits of an Affiliate under this Agreement for only the period of time the entity qualifies as an Affiliate under the definition (in accordance with Section 7.C), all obligations under this Agreement that accrued to such entity while an Affiliate will survive until fulfilled even though the entity no longer qualifies as an Affiliate.

D. Sublicense.

Subject to the terms and conditions of this Agreement, Company and its applicable Affiliates and Sublicensees will have the right to grant Sublicenses through multiple tiers. Each Sublicense must be granted pursuant to a valid and binding written agreement that expressly states that such Sublicense is subject to, and the applicable Sublicensee is obligated to comply with, all of the terms and conditions of this Agreement applicable to the Company: Sections 2.B.iii, 2.E, 2.G.i, 2.H, 8.C, 8.F, 9.A, 9.B and 9.I (the "***Flow-Down Provisions***") (including providing that University is a third-party beneficiary to such provisions of such Sublicense). As specified in Section 2.I, Company will use reasonable efforts to ensure that all Licensed Entities will comply with all such terms and conditions of this Agreement applicable to Company. In the event of any inconsistency between the Sublicense and any of the Flow-Down Provisions, the applicable Flow-Down Provisions will control with respect to the rights hereunder subject to such Sublicense. Any Sublicense that does not include the Flow-Down Provisions is null and void ab initio. Company will promptly after Company's receipt thereof provide University with a copy of each Sublicense and any amendments thereof; provided, that, any Sublicense may be redacted to delete any terms not material to compliance with this Agreement. Any entity that is an Affiliate may, instead of obtaining rights through Section 2.A, be granted rights as a Sublicensee.

E. Reservation of Rights.

University reserves the worldwide right to: (i) practice or have practiced, and to grant to third parties the right to practice or have practiced, the Licensed Patents, including tangible property embodying the same, for Non-Commercial Research Purposes and for the conduct of its operations and the operations of its Affiliates; and (ii) permit its Affiliates (including the University of Chicago Medical Center ("***UCMC***")), contractors, and consultants to do any of the activities set forth in clause (i) in connection with the operations of University and its Affiliates (including UCMC) for Non-Commercial Research Purposes. For the avoidance of doubt, the rights retained by University include the right of University and its Affiliates to practice the Licensed Patents for their respective healthcare operations in providing patient care. University reserves the worldwide right to practice or have practiced, and to grant to third parties the right to practice or have practiced, Technical Information for any purpose.

F. [RESERVED]

G. U.S. Government Rights.

i. Company understands that this Agreement is subject to any rights of or obligations to the U.S. Government, including, as applicable, under 35 U.S.C. § 200 et seq., 37 C.F.R. § 401 et seq. ("***Bayh-Dole Act***"), or any other applicable law or regulation, including but not limited to the grant to the U.S. Government of a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced any Subject Invention (as defined in the Bayh-Dole Act) for or on behalf of the U.S. Government throughout the world. Company agrees to comply and permit University to comply with the Bayh-Dole Act, including the provisions thereof to provide the reporting required and to substantially manufacture Subject Inventions and products produced through the use of Subject Inventions in the United States, unless waived.

ii. At Company's request and reasonable expense, such reasonable expense incurred by University to be reimbursed by Company, University shall seek a waiver of the substantial manufacturing obligations under the Bayh-Dole Act. Company represents to University that, as of the Effective Date, Company and each of its Affiliates is a "small business firm" as defined in 15 U.S.C. §632, and Company shall promptly notify University of any changes thereto.

H. No Other Rights.

No rights in and to the Licensed Patents and Technical Information other than those provided in this Section 2 or otherwise expressly provided in this Agreement or in any other agreement between University and any Licensed Entity, are conveyed by University. No rights to any patents except those included in the Licensed Patents are conveyed by University in this Agreement. Nothing contained in this Agreement or a Party's performance hereunder will be construed as conferring, by implication, estoppel or otherwise, upon any Licensed Entity, any party in privity with any Licensed Entity, or any customer of any of the foregoing, any right, title or interest under any intellectual or tangible property right of University at any time, except for those rights expressly granted in Section 2.A or otherwise expressly provided in this Agreement or in any other agreement between University and any Licensed Entity. No rights are granted to University in this Agreement under any intellectual property owned by Company or any other Licensed Entity.

I. Responsibility for Licensed Entities.

In the event that University believes that any Licensed Entity has breached this Agreement, [***]. For the avoidance of doubt, a Sublicensee's failure to comply with the applicable terms of this Agreement or its sublicense agreement will in no way impact the rights and obligations of any other Licensed Entity, other than Company, under this Agreement.

3. **Payments**

A. Common Stock Grant.

Company shall irrevocably issue to University, in partial consideration of Company's receipt of the licenses granted under this Agreement, [***] shares of Company's common stock, par value $0.001 ("***Common Stock***"), which shares represent [***] of the sum of the Company's (i) outstanding Common Stock as of the Effective Date, and (ii) [***], on an as-converted to Common Stock basis. Such issuance to University shall be pursuant to an agreed-upon common stock purchase agreement, to be executed between Company and University promptly (but in any event within [***] after the Effective Date. The rights granted to University under this Section 3.A are not transferrable except to an Affiliate of University for administrative convenience.

B. Royalties.

Company shall pay to University Royalties as follows, on a Licensed Product-by-Licensed Product and country-by-country basis:

i. Valid Claims Royalty. Subject to Section 3.B.ix, with respect to a Valid Claim Licensed Product in the country of sale (all such Royalties, in the aggregate, the "***Valid Claims Royalty***"):

(1) [***]

(2) [***]

[***].

ii. Unique Target Royalty. Subject to Section 3.B.ix, for sales of any Unique Target Licensed Product in a country in which such Licensed Product is not covered by a Valid Claim (all such Royalties, in the aggregate, the "***Unique Target Royalty***"):

(1) [***]

(2) [***]

iii. Materials Royalty. Subject to Section 3.B.ix, for sales of any Materials Licensed Product that is not a Unique Target Licensed Product, which sales are in a country in which such Licensed Product is not covered by a Valid Claim (all such Royalties, in the aggregate, the "***Materials Royalty***"):

(1) [***]

(2) [***]

iv. In no event shall more than one Royalty be owed with respect to the individual sale of any Licensed Product in any country, [***]

v. No other Licensed Products shall be subject to any Royalties.

vi. Royalty Period. The Royalties shall be payable only for the following applicable time period (the "***Royalty Period***"): (a) with respect to sales of a Valid Claim Licensed Product in the country of sale, until the last to expire Valid Claim of the Licensed Patents covering such Valid Claim Licensed Product in the country of sale, (b) subject to Section 3.B.iv, with respect to sales of a Unique Target Licensed Product in a country, [***] from the First Commercial Sale of such Licensed Product in such country, and (c) subject to Section 3.B.iv, with respect to sales of a Materials Licensed Product in a country, [***] from the First Commercial Sale of such Licensed Product in such country.

vii. Paid-up License. If no Royalty is due with respect to a sale of a Licensed Product in a country, the license granted pursuant to Section 2.A with respect to such Licensed Product in such country shall become royalty-free, perpetual, irrevocable, freely sublicenseable and freely transferrable and no other payments shall be due to University with respect to such Licensed Product in such country.

viii. Importance of Technical Information. Company has requested, and University has agreed, to grant certain rights to Technical Information. Company requires these rights in order to develop and commercialize the technology licensed. Because of the importance of Technical Information, Company has agreed to pay certain Royalties to University on Licensed Products, as specified above, even if not covered by a Valid Claim, in order to obtain rights to Technical Information. Company has agreed to these payments because of the commercial value of Technical Information, separate and distinct from the commercial value of the Licensed Patents. Company acknowledges that the reduced royalty for certain Licensed Products that are not covered by a Valid Claim is fair and reasonable in order to compensate University for Company's license of the Technical Information.

ix. Third Party Licenses. In the event that a Licensed Entity acquires a license or other right under any patent owned and controlled by any unaffiliated third party (as defined in Section 9.P.xi) that will otherwise be infringed by, or is necessary for, the manufacture, use, sale, offer for sale or importation of a Licensed Product by a Licensed Entity, then [***] of the amounts paid by any Licensed Entity for such license or rights may be credited against Royalties. However, in no event will the Royalty paid to University be reduced below:

(x) Valid Claims Royalty:

1. [***]

2. [***];

provided, however, that in no event, including the above described reductions on payments of Net Sales of Sublicensees and any offsets, will the Valid Claims Royalty paid to University be reduced to below [***] of Net Sales of Valid Claim Licensed Products.

(y) Unique Target Royalty:

1. [***]

2. [***]

provided, however, that in no event, including the above described reductions on payments of Net Sales of Sublicensees and any offsets, will the Unique Target Royalty paid to University be reduced below [***] of Net Sales of Unique Target Licensed Products.

(z) Materials Royalty:

1. [***]

2. [***]

C. Minimum Royalties.

If Company has not paid Royalties with respect to Net Sales made in any period set forth that equal or exceed the applicable amount set forth below, Company shall pay to University the difference between the amount set forth below and the Royalties paid with respect to Net Sales made in the relevant period, within [***] after the end of such period.

Period	Minimum Royalties
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

The first "Minimum Royalty Period" begins at the start of the first full Calendar Quarter beginning after the [***] of the First Commercial Sale of any Licensed Product in any country [***].

D. License Maintenance Fees.

Company will pay to University a maintenance fee of [***] per calendar year or part thereof during which this Agreement is in effect, only in accordance with the next sentence. The first such maintenance fee payment will be due on the third (3rd) anniversary of the Effective Date, and subsequent payments will be due on each anniversary thereafter until the First Commercial Sale of any Licensed Product in any country.

E. Milestone Payments.

Company shall notify University within [***] after Company becomes aware thereof, when each of the following events are accomplished regarding each applicable Licensed Product by a Licensed Entity and pay to University the following amounts (which sums are nonrefundable and noncreditable against Royalties):

[

i. [***].

ii. [***].

iii. [***]

iv. [***]

v. [***].

vi. [***]

vii. [***]

Each milestone shall be paid [***].

F. Payment and Reporting.

i. (y) Company shall pay Royalties owing to University on a quarterly basis, with such amounts due and received by University on or before the [***] following the end of the Calendar Quarter [***].

ii. (z) [***].

iii. Except as otherwise directed, Company shall pay all amounts owing to University under this Agreement in U.S. dollars to University at the address provided in Section 9.D or paid via wire transfer to the account specified by University to Company in writing. Any necessary conversion of currency into United States dollars will be at the applicable rate of exchange (A) of Citibank, N.A. (or its successor), in New York, New York, on the last day of the Calendar Quarter in which the applicable Net Sales were made or such other applicable transaction occurred or (B) with respect to Net Sales by a Sublicensee, using the methodology consistently applied by such Sublicensee. University is exempt from paying income taxes under U.S. law. Therefore, Company shall make all payments due under this Agreement without deduction for taxes, assessments, or other charges of any kind which may be imposed on University by any government outside of the United States or any political subdivision of such government with respect to any amounts payable to University pursuant to this Agreement. Subject to the foregoing, Company or the applicable Licensed Entity shall assume all such taxes, assessments, or other charges that may reduce University's net Royalties or all other payments due under this Agreement, such as bank transfer fees.

iv. Company shall submit to University a full accounting showing how any amounts owing to University under this Section 3 have been calculated along with each such payment therefore. For Royalties, such accounting will be on a per country and Licensed Product basis and will be summarized substantially in the form shown in Schedule D of this Agreement. Such accounting will include completing a quarterly Royalty forecast section. In the event no payment is owed to University, within [***] after the end of each Calendar Quarter after the First Commercial Sale of any Licensed Product in any country, Company will provide to University a statement setting forth that fact.

v. Regardless of the circumstances, no payment made to University is refundable and only Royalty payments are creditable toward the minimum royalty as set forth in Section 3.C.

G. Sublicense Revenue.

Company shall pay to University a) [***] of any Sublicense Revenue received before the first anniversary of the Effective Date and b) [***] of any Sublicense Revenue received thereafter. Payments will be made (or assigned, as applicable) to University within [***] of receipt by Company.

H. Overdue Payments.

i. Any payments by Company that are not received by University on or before the date such payments are due under this Agreement will accrue interest at the lesser of: (a) [***]] per month; and (b) the maximum rate allowed by law. Interest will accrue beginning on the first day following the due date for payment and will be compounded monthly. Payment of such interest by Company will not limit, in any way, University's right to exercise any other remedies University may have as a consequence of the lateness of any payment. Company will be responsible for all costs of collection incurred by University including attorney's fees and court costs.

ii. The foregoing is subject to Section 3.F.i.z.

4. **Diligence**

A. Development Obligations.

Company shall [***].

Development Plan.

Within [***] of the Effective Date, Company shall provide University with a detailed development plan for the commercialization of one or more Licensed Products. Such plan will include, as applicable, high-level research and development plans (including proposed estimated aggregate expenses for such activities), timetables for achieving milestones and necessary government or regulatory approvals, high-level summary of market research information on competitors and market size, and sales and marketing plans for the twelve (12) months following the Effective Date, as well as a timetable for achieving milestones and/or Company's strategic development plans for the following two years. Company shall revise the development plan on an annual basis and provide University with such revised plan within [***] of June 30th, concurrent with the progress report due under Section 5.B. Upon reasonable request, Company shall meet with University in a timely manner to review any such development plan. [***]

B. Promotion and Marketing.

Company shall use commercially reasonable efforts (and in no event less effort or relative expense than the level of resources and talent as is customary for Company to use for other products with similar market potential) to promote, advertise, and sell the Licensed Products after receipt of regulatory approval in the applicable jurisdiction.

C. Extension of Timelines.

If Company has failed to achieve any development or other obligation described in Section 4.A, Section 4.B, Section 4.C or Schedule E, then University shall notify Company thereof [***]

5. **Records and Review**

A. Full and Accurate Records.

University may from time to time and at any reasonable time, not exceeding once every twelve (12) months, through independent auditors as University may designate that are reasonably acceptable to Company and any other applicable Licensed Entity, inspect and copy the books and records of any Licensed Entity in order to verify the payments due hereunder, the accuracy of any reported statement by Company, or of any other financial obligation under this Agreement. Company shall keep, and shall obligate each other Licensed Entity to keep, continuous, full and accurate books and records in sufficient detail so that Company's compliance with its financial obligations under this Agreement can be properly determined without undue delay or difficulty. Such books and records will be maintained for at least five (5) years after the activity or Royalty reporting period(s) to which they relate. Such books and records will include but not be limited to the following: accounting general ledgers; invoice/sales registers; original invoice and shipping documents; federal and state business tax returns; company financial statements; sales analysis reports; inventory and/or manufacturing records; sublicense and distributor agreements; budgets and payment records for Service Payments; price lists, product catalogs and other marketing materials; and, [***] laboratory notebooks. Company shall, and shall obligate all other Licensed Entities to, comply with this Section 5.A (other than the need to maintain, and subject to inspection, budgets and payment records for Service Payments, which only Company is obligated to maintain and submit to audit). University shall provide Company with a full copy of any inspection report.

Such inspection will be made at the expense of University, unless such examination discloses a discrepancy of [***] or more in the amount of payments due University. In such case Company shall be responsible for reimbursing University for the reasonable examination fee and expenses charged by the auditor along with the underpayment. Any underpayment will bear interest as described in Section 3.H. Company shall pay past due payments for any error, including any payment deficiency for periods prior to the period under inspection if such deficiency is determined in accordance with such inspection, [***] of written notice thereof. The foregoing shall be subject to Section 3.F.i.z.

University and the auditor will maintain in confidence such inspection, any information obtained during such inspection (including any financial or proprietary information) and the resulting report. The auditor shall, prior to any audit, enter into a confidentiality agreement with Company and, if the audit involves any other Licensed Entity, with such Licensed Entity. The auditor may from time to time consult University and any of its employees or third party counsel on questions as they relate to this Agreement, but any questions involving the interpretation of this Agreement shall be subject to mutual agreement of the Parties or Section 9.G. The auditor may not disclose any of Company's or any other Licensed Entity's financial or proprietary information except (a) to University, as required to conduct the inspection, to report and substantiate the results, as otherwise permitted by this Agreement, or (b) if the information is already publicly known without breach by the auditor or University.

B. Progress Reports.

Within [***] of each June 30 and December 31 during the term of this Agreement, Company shall deliver a written report to University, in substantially the form of Schedule F attached hereto. The report will describe the progress of Company toward achieving the goals of the development plan and bringing Licensed Products to market (and any proposed revisions to the plan developed during the preceding six months). Company shall promptly notify University in writing upon the First Commercial Sale of each Licensed Product and when Company's obligation to begin making Royalty payments begins. Upon the First Commercial Sale of each Licensed Product, Company shall provide in writing to University the following information: the date of First Commercial Sale, the generic name, and the tradename of such Licensed product. Notwithstanding anything to the contrary in this Section 5.B, if Company has made at least one Royalty payment to University, Company will only be required to deliver a written report once annually within [***] after December 31 of each calendar year during the term of this Agreement.

6. **Patents**

A. Prosecution, Defense and Maintenance.

i. University will control the preparation, filing, prosecution, and maintenance and, subject to the provisions of Section 6.A.i, abandonment, of the Licensed Patents. Company shall cooperate, and obligate each other Licensed Entity to cooperate, with University in a timely manner in the preparation, filing, prosecution and maintenance of the Licensed Patents by disclosing such information as may be requested by University and by promptly executing such documents as University may reasonably request in connection therewith. As between the Parties, Company shall, and shall obligate each other Licensed Entity to, bear its own costs in connection with their cooperation with University under this Section 6.A. University will use reasonable efforts to provide, and will have its legal counsel provide, Company with copies of material documents received or prepared by University in the filing, prosecution and maintenance of the Licensed Patents such that Company has reasonable time for review and/or comment. University will use reasonable efforts to provide, and will have its legal counsel provide, Company with the opportunity to consult with the University regarding all patent prosecution actions for the Licensed Patents. University will reasonably consider Company's comments with respect thereto and will file any Licensed Patent in any territory requested by Company. Defense of the Licensed Patents is addressed in Sections 6.C.v and 6.D.

ii. [***].

iii. For the sake of clarity and notwithstanding anything to the contrary herein, (a) Company retains all its right, title and interest in any patent right which is jointly owned by University and Company; (b) in no event shall Company lose any such right, title and interest pursuant to this Agreement, even if the license granted to Company under the University's rights in a jointly owned patent right is terminated, and Company may license or transfer its interest in such patent right; and (c) while such patent right shall be subject to the provisions of Section 6 with respect to University's interest therein (as a Licensed Patent), Company and University shall coordinate with respect to the preparation, filing, prosecution and maintenance of any such jointly owned patent right.

B. Patent Costs.

University shall conduct the activities it controls pursuant to Section 6.A using patent counsel reasonably acceptable to Company. Company shall pay all necessary and reasonable fees and expenses incurred by University relating to the preparation, filing, prosecution, defense and maintenance of the Licensed Patents ("***Patent Costs***").

i. Company shall pay all Patent Costs incurred by University prior to the Effective Date that have not already been paid prior to the Effective Date pursuant to the Option Agreement. Such payment is due and payable in four quarterly installments, the first due upon execution of this Agreement by Company. The remaining three quarterly installments will be due at the end of each subsequent full Calendar Quarter. (For the avoidance of doubt, approximately [***] in such unpaid Patent Costs has been incurred by University prior to the Effective Date.)

ii. Payment for Patent Costs incurred by University on or after the Effective Date will be invoiced to Company and Company shall pay such invoices within [***] of the date on which Company receives the invoice.

iii. If Company fails to pay invoices for Patent Costs more than twice on or before the date such payment is due, then upon request by University, (a) Company shall make timely estimated advanced payments for the filing of applications of Licensed Patents in accordance with this Section 6.B.iii; (b) University will specify the amount of any such advanced payments on an invoice provided to Company, identifying the applicable Licensed Patent, country and estimated cost; (c) Company shall pay all such advance payments of Patent Costs to University on or before the relevant patent deadline, which date shall be specified by University on the invoice; (d) invoices for advanced payments will be reconciled with the advance payments made by Company every six (6) months; and (e) any excess payment by Company will be credited to future Patent Costs specified in this Section 6.B.

iv. Notwithstanding any provisions to the contrary in this Agreement, if University does not receive, by the date specified, full payment for any Patent Costs with respect to a Licensed Patent, then, unless within [***] after written notice from University Company pays such amount or notifies University of a dispute with respect thereto, University may, at its sole discretion at any time, do any one or more of the following: (a) by written notice to Company, abandon such Licensed Patent to which such payment applies; (b) by written notice to Company, revoke Company's license under such Licensed Patent; or (c) by written notice to Company, convert any license Company receives under such Licensed Patent from an exclusive license to a non-exclusive license.

v. Company may at any time elect to discontinue its support of Patent Costs for one or more patent applications or patents within the Licensed Patents. If Company decides to discontinue its support of Patent Costs for a specific Licensed Patent(s), Company shall notify University in writing at least [***] prior to any such discontinuation. Company will be responsible for reimbursing University for any Patent Costs associated with such Licensed Patent(s) that University incurs up to [***] after the date of the receipt of notice, whether or not such costs were invoiced to University during such period.

vi. Upon University's exercise of its rights under Section 6.B.iv.b following Company's failure to pay any Patent Costs by the date specified or its discontinuation of support pursuant to Section 6.B.v, all of Company's rights in or to such Licensed Patents will automatically terminate regardless of whether Schedule A reflects such termination and all rights therein immediately revert to University. Without limiting any other rights of University, University may in its sole discretion, abandon the applicable patent or patent application or license such patent or patent application to a third party at any time after such termination. If:

(1) University continues to prosecute and/or maintain any such former Licensed Patent,

(2) Company has continued to support at least the European and United States counterparts of such former Licensed Patent, and

(3) such former Licensed Patent has not been licensed by University to a third party,

then, at any time on or before the end of the first anniversary after the issuance of any such Licensed Patent, Company may elect to re-acquire its exclusive license to such former Licensed Patent and any patent applications that claim priority to such former Licensed Patent and any patents issuing from any of the foregoing, by paying to University before the end of such period both:

(y) [***]

(z) [***]

Challenges.

If Company brings an action or proceeding, or assists any third party in bringing an action or proceeding, seeking a declaration or ruling that any Valid Claim in any of the Licensed Patents is invalid or unenforceable, then to the extent not prohibited by applicable law and in addition to, not in lieu of, other rights and remedies of University:

i. during the pendency of such action or proceeding, the Royalty rate applicable to payments made pursuant to Section 3.B.i with respect to Valid Claim Licensed Products covered by the applicable Valid Claim that are sold by Company will automatically increase to [***] the royalty rate currently set forth in Section 3.B.i;

ii. should the outcome of such action or proceeding from which no appeal has been or can be taken determine that any such claim of a Licensed Patent challenged is valid and enforceable, the Royalty rate applicable to payments made pursuant to Section 3.B.i with respect to Valid Claim Licensed Products covered by the applicable Valid Claim that are sold by Company will automatically increase to [***] the Royalty rate currently set forth in Section 3.B.i [***] ;

iii. For clarity, Company will have no right to recoup any Royalties or other amounts paid before such action or proceeding or during the period in which such action or proceeding is pending (including on appeal);

iv. Company shall continue to make all payments directly to University and shall not, and shall not seek to, pay into any escrow or other similar account;

v. For clarity, University will have full control and authority to defend the Licensed Patents in such action or proceeding (but not other Infringement proceedings); and

vi. Company shall provide written notice to University at least [***] , if practicable, before Company initiates any action or proceeding seeking a declaration or ruling that any claim of any Licensed Patent is invalid or unenforceable. Company shall include with such written notice an identification of all prior art it believes is material.

C. Infringement.

i. Notice. In the event either Party becomes aware of any possible or actual infringement, misappropriation, or other violation of any Licensed Patents in the Field in the Territory, or any opposition, inter-partes review, post-grant proceeding, or any other challenge against the validity or enforceability of any Licensed Patent or any claim therein brought by any unaffiliated third party (each, an "***Infringement***"), that Party will promptly notify the other Party and provide it with details regarding such Infringement.

ii. Company's Right to Bring Infringement Action. Company will have the first right, but not the obligation, to take action in the prosecution, prevention, defense or termination of any Infringement and University will join as party plaintiff in any such action if requested by Company. Before Company commences an action with respect to any Infringement, Company shall consider in good faith the views of University and potential effects on the public interest in making its decision whether to sue. Company shall keep University reasonably informed of the progress of the prosecution, prevention, defense and/or termination of such actions and shall give University a reasonable opportunity in advance to consult with Company and offer its views about major decisions. Company shall give careful consideration to those views, but will have the right to control the action regarding Infringement; provided, however, that if Company fails to defend in good faith the validity and/or enforceability of the Licensed Patents in the action, or if Company's license to a Valid Claim in the suit terminates, then University may elect, but will not be obligated, to take control of the action and, notwithstanding anything to the contrary in this Section 6.D.ii, any costs will be borne by University and any recovery will be apportioned in the same manner as an action initiated by University pursuant to Section 6.D.iii. Any and all out-of-pocket expenses, including reasonable attorneys' fees for counsel selected by University, incurred by University with respect to the prosecution, prevention of further infringement through the negotiation of a license, termination, adjudication and/or settlement of an Infringement action regarding a Licensed Patent initiated by Company and controlled by Company, including any related appeals, will be paid for entirely by Company, provided that Company, and not University, is controlling the infringement action, and Company shall hold University free, clear and harmless from and against any and all such expenses. Company shall not compromise or settle any action resulting from an Infringement without the prior written consent of University (including any settlement with a potential Sublicensee selling a generic or biosimilar version of a Licensed Product) which consent will not be unreasonably withheld or delayed. In the event Company controls the action pursuant to this Section 6.D.ii, it will first reimburse itself from any sums recovered in such suit or in settlement thereof for all out-of-pocket and documented costs and expenses, including reasonable attorneys' fees, necessarily incurred in the prosecution of any such suit. If, after such reimbursement, any funds remain, then University will receive an amount equal to [***] of such remainder and the remaining [***] of such remainder will be retained by Company.

iii. University's Right to Bring Infringement Action. If Company does not take action in the prosecution, prevention, defense or termination of any Infringement pursuant to Section 6.D.ii above, and has not commenced negotiations with the infringer or challenger for the discontinuance of said Infringement, within [***] after it becomes aware of such Infringement or, at any time thereafter, ceases to diligently continue such prosecution, prevention, defense or termination, University may elect, but is not obligated, to do so, at University's sole expense. Should University so elect to bring suit against an infringer, Company shall cooperate fully with University, including joining as party plaintiff in any such suit if requested by University. In the event University exercises its right pursuant to this Section 6.D.iii, it will recover for its own account any damages, awards or settlements.

iv. Own Counsel. Each Party will always have the right to be represented by counsel of its own selection and at its own expense in any suit instituted by the other Party under this Section 6.D.

v. Cooperation. Each Party will cooperate fully in any action under this Section 6.D that is controlled by the other Party, provided that the controlling Party reimburses the cooperating Party promptly for any reasonable out-of-pocket costs and expenses incurred by the cooperating Party in connection with providing such assistance. University shall not compromise or settle any action in this Section 6.D without the prior written consent of Company, which consent will not be unreasonably withheld or delayed. Company may exercise its rights under this Section 6 with or through any other Licensed Entity.

vi. Declaratory Judgment. If a declaratory judgment action is brought alleging invalidity or unenforceability of any claims within the Licensed Patents, the applicable Party shall promptly notify the other Party in writing and Company will have the right to control such action pursuant to this Section 6.D; provided, however, that if such declaratory judgment action is brought naming University as a defendant, the Parties will consult regarding such declaratory judgment action and Company will reasonably consider University's comments with respect thereto.

vii. Technical Information. University will have the exclusive right (but not the obligation), to the extent applicable, to institute legal action against any third party arising out of such third party's actual or threatened infringement or misappropriation of any Technical Information, and University will retain any and all proceeds from any such actions and settlements in connection therewith. Company shall have no right to make any demands or claims, bring suit, effect any settlements or take any other action with respect to any such infringement or misappropriation without the prior written consent of University.

7. **Term and Termination**

A. Term.

This rights and licenses granted herein will take effect on the Effective Date and will expire, on a Licensed Product by Licensed Product basis, on the expiration of all applicable Royalty Periods with respect to that Licensed Product. This Agreement will expire, in its entirety, upon the expiration of the last Royalty Period, unless earlier terminated pursuant to the terms of this Agreement. Upon expiration of the rights and licenses granted herein with respect to a Licensed Product, those rights and licenses shall become perpetual, fully-paid and royalty free. Upon expiration of this Agreement in its entirety, the rights and licenses granted to Company shall become perpetual, fully-paid and royalty free.

B. University's Right to Terminate.

Without limiting other rights, University will have the right to terminate this Agreement as follows, in addition to all other available remedies, but subject to any other provisions of this Agreement:

i. If Company fails to make any payment when due, this Agreement will terminate effective thirty (30) days after University's written notice to Company describing such failure, unless Company makes such payment within such thirty (30) days.

ii. If Company has not fulfilled one or more of its obligations under Section 4, including having failed to meet any of the development obligations set forth on Schedule E, then subject to Section 4.D, this Agreement will terminate effective ninety (90) days after written notice from University to Company describing such breach, unless Company cures such breach within such ninety (90) day period.

iii. If Company breaches any obligation of this Agreement other than an obligation to make a payment when due or a failure to perform the obligations in Section 4, this Agreement will terminate in its entirety, effective ninety (90) days after University's written notice to Company describing such failure, unless Company or such Licensed Entity cures such failure to the reasonable satisfaction of University within such ninety (90) days.

iv. If Company files, or has filed against it, a petition under any bankruptcy or insolvency law, Company shall immediately notify University. If such petition is not dismissed within [***] of Company's filing, or if Company makes an assignment of all or substantially all of its assets for the benefit of its creditors, then, unless prohibited by applicable law, this Agreement will automatically terminate at the end of such [***] period with respect to Company unless University provides written notice to Company within such [***] period.

v. If Company will be dissolved, is liquidated or otherwise ceases to exist, other than for reasons specified in Section 7.B.iv or a corporate restructuring, then, unless prohibited by applicable law, this Agreement will automatically terminate as of: (a) the date articles of dissolution or a similar document is filed on behalf of Company with the appropriate governmental authority; or (b) the date of establishment of a liquidating trust or other arrangement for the winding up of the affairs of Company.

vi. If any Licensed Entity other than Company breaches any obligation of this Agreement other than an obligation to make a payment when due or a failure to perform the obligations in Section 4, Company's right to sublicense the rights granted in Section 2 of this Agreement to such Licensed Entity will terminate in its entirety and, upon written notice from University, Company will immediately terminate its grant of such rights to such Licensed Entity, unless such Licensed Entity cures such failure to the reasonable satisfaction of University.

vii. If any Licensed Entity other than Company files, or has filed against it, a petition under any bankruptcy or insolvency law, Company shall immediately notify University. If such petition is not dismissed within [***] of such Licensed Entity's filing, or if such Licensed Entity makes an assignment of all or substantially all of its assets for the benefit of its creditors, then, unless prohibited by applicable law, Company's right to grant the rights granted in Section 2 of this Agreement will automatically terminate at the end of such [***] period with respect to such Licensed Entity unless University provides written notice to Company within such [***] period, and Company will immediately terminate its grant of such rights to such Licensed Entity.

viii. If any Licensed Entity other than Company will be dissolved, is liquidated or otherwise ceases to exist, other than for reasons specified in Section 7.B.iv or a corporate restructuring, then, unless prohibited by applicable law, Company's right to grant the rights granted in Section 2 of this Agreement will automatically terminate as of: (a) the date articles of dissolution or a similar document is filed on behalf of such Licensed Entity with the appropriate governmental authority; or (b) the date of establishment of a liquidating trust or other arrangement for the winding up of the affairs of such Licensed Entity, and Company will immediately terminate its grant of such rights to such Licensed Entity.

C. Termination and Affiliates.

i. For the avoidance of doubt, if this Agreement expires or terminates for any reason, the rights and licenses granted to Company's Affiliates hereunder will expire or terminate to the same extent as such rights and licenses expire or terminate with respect to Company.

ii. In the event that any entity ceases to be an Affiliate of Company, whether as the result of a sale, merger, corporate reorganization, or otherwise, the licenses granted to such entity pursuant to Section 2.A will automatically and immediately terminate.

iii. Notwithstanding Section 7.C.i or 7.C.ii, if the applicable Affiliate has become a Sublicensee, such Sublicense shall continue pursuant to Section 7.E.viii.

D. Company's Right to Terminate.

In the event Company desires to terminate this Agreement in its entirety, or as to any Licensed Product or country, Company shall provide written notice to University thereof and this Agreement will terminate, in its entirety or with respect to the applicable Licensed Product or country, as applicable, at the end of the Calendar Quarter following the Calendar Quarter during which Company provides such notice.

E. Survival.

The rights and obligations accruing prior to any termination or expiration of this Agreement for any reason will survive, including: (i) all rights or causes of action accruing to either Party under this Agreement as of the effective date of termination or expiration or based upon any act or

omission occurring prior to the effective date of termination or expiration; (ii) Company's obligation to pay Royalties accrued prior to the date of termination or expiration, (iii) Company's obligation to pay Patent Costs accrued prior to the expiration or termination of this Agreement; (iv) Company's obligation to report Net Sales for sales made during the term of this Agreement and keep records, as required by Sections 3.F and 5; (v) University's right to audit under Section 5.A; (vi) Section 2.H (no other rights), any license then described in Section 3.B.vii, this Section 7.E (survival), Section 7.F (post-termination obligations of Company), clause A through D of Section 8 (representations and warranties), and Section 9 (miscellaneous) of this Agreement and Schedule G until their purposes are fulfilled; (vii) the Licensed Entities may sell or otherwise dispose of all Licensed Products in the process of manufacture, testing, in use or in stock, provided that Company shall remain obligated to make payment of applicable Royalties to University for such Licensed Products in accordance with Section 3.B; (viii) any direct Sublicensee of Company that is in good standing (i.e., that is not then in breach of the Flow-Down Provisions with respect to which breach University has provided notice pursuant to Section 2.I) may, upon written notice to University from such Sublicensee and Company provided within [***] after any termination of this Agreement, retain its rights under the relevant Licensed Patents and Technical Information as a direct license from University if such Sublicensee agrees in writing to assume all of the applicable obligations of Company hereunder; and (ix) to the extent Company or any other Licensed Entity retains a license hereunder, Company or such other Licensed Entity may retain any Confidential Information of University to the extent applicable to such surviving license.

F. Post Termination Obligations of Company.

If this Agreement is terminated for any reason prior to expiration, then upon such termination, the rights of Company:

i. (a) to practice the issued Valid Claims in the Licensed Patent(s), or (b) to use the Technical Information that is either Confidential Information of University or Materials, or

ii. to discover, research, develop, make, have made, use, import, have sold, offer to sell and sell Unique Target Licensed Products and Materials Licensed Products

will immediately thereafter cease and revert to University and Company shall not practice such issued Valid Claims in the Licensed Patents or utilize any Technical Information that is the Confidential Information of University or any Materials for such purposes.

Except to the extent set forth in Section 7.E, any other rights conferred to Company by this Agreement will also immediately thereafter cease. Except as necessary to comply with applicable laws, regulations, or the terms and conditions of this Agreement, promptly following the termination or expiration of this Agreement, Company shall, and shall obligate all other Licensed Entities to, deliver to University, or at University's request irretrievably destroy, (i) all tangible materials that are Confidential Information of University embodying any unexpired Valid Claims of Licensed Patents or (ii) any Technical Information that is (i) Confidential Information of University or (ii) Materials; except that each Licensed Entity's legal counsel may retain one copy of such Confidential Information in its confidential files for archival purposes only. Company shall provide to University a certification that such delivery or destruction has been completed.

Company shall not thereafter operate or conduct business in any manner that might tend to create the impression that this Agreement is still in force, or that Company has any right to use any one or more of such Licensed Patents or Technical Information. All of the foregoing shall be subject to Company's rights in Section 7.E. Upon termination or expiration, all payments, including fees and costs, then due under this Agreement and not yet paid will become immediately due and payable.

8. **Representations, Warranties, Disclaimers; Indemnification; Insurance; Primary Responsibility**

A. Representations, Warranties and Covenants of Company.

Company hereby represents, warrants and as applicable covenants that:

i. Company is a corporation duly organized, validly existing and in good standing under the laws of Delaware, has the corporate power and authority to execute and deliver this Agreement, and perform all obligations under this Agreement.

ii. The execution, delivery and performance have been duly and validly authorized by Company, and upon execution and delivery by Company and University, this Agreement will constitute a valid, enforceable and binding agreement of Company.

iii. Company has no other agreements that conflict with the obligations undertaken by Company and rights and licenses granted by Company in this Agreement.

iv. Company shall comply and obligate all other Licensed Entities to materially comply with applicable laws, including obligating such Licensed Entity that any manufacture of Licensed Product(s) by a Licensed Entity, and/or its respective vendor(s), suppliers, agents or contractors, will materially comply with and conform with applicable law and to all applicable specifications required by any regulatory body and/or market approval granted.

B. [***].

C. Disclaimer of Warranties.

EXCEPT AS EXPRESSLY PROVIDED IN SECTION 8.B, (a) THE LICENSED PATENTS AND TECHNICAL INFORMATION ARE PROVIDED AS IS AND WHERE IS, AND UNIVERSITY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS, STATUTORY, IMPLIED OR OTHERWISE, AND (b) IN PARTICULAR, UNIVERSITY DISCLAIMS ALL REPRESENTATIONS AND

WARRANTIES, INCLUDING ABOUT (I) THE VALIDITY, SCOPE OR ENFORCEABILITY OF ANY OF THE LICENSED PATENTS; (II) THE ACCURACY, SAFETY OR USEFULNESS FOR ANY PURPOSE OF ANY INFORMATION PROVIDED BY UNIVERSITY TO ANY LICENSED ENTITY; (III) FURNISHING ANY TECHNICAL INFORMATION; (IV) WHETHER THE PRACTICE OF ANY CLAIM CONTAINED IN ANY OF THE LICENSED PATENTS OR TECHNICAL INFORMATION WILL OR MIGHT INFRINGE INTELLECTUAL PROPERTY RIGHTS; (V) THE PATENTABILITY OF ANY INVENTION CLAIMED IN THE LICENSED PATENTS; (VI) THE ACCURACY, SAFETY, OR USEFULNESS FOR ANY PURPOSE OF ANY PRODUCT OR PROCESS MADE OR CARRIED OUT IN ACCORDANCE WITH OR THROUGH THE USE OF THE LICENSED PATENTS; AND (VII) ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

C. Indemnification.

i. Company shall, and shall obligate each other Licensed Entity to, indemnify, defend and hold harmless University, its Affiliates and the trustees, directors, officers, students, employees, fellows and agents of any of the foregoing (collectively the "***Indemnified Persons***") from and against any and all claims, demands, liabilities, losses, damages, penalties, costs and/or expense (including attorneys' and witnesses' fees and court costs) of any kind or nature, brought by any unaffiliated third party that is not an Indemnified Person, to the extent based upon, arising out of, or otherwise relating to, as applicable, Company's or the applicable Licensed Entity's activities under this Agreement and/or a Sublicense, including without limitation (i) any such claim arising from the development, production, use, sale, export, import or other disposition of any Licensed Product and all activities associated therewith, or (ii) any such use of Technical Information provided by University to any Licensed Entity.

ii. Such indemnification is conditioned on the following: (i) University shall promptly notify Company and any other relevant Licensed Entity of any claim or action that may be subject to this Section 8.D, provide to Company and any such other Licensed Entity a full description of all relevant facts, and cooperate fully with Company and such other Licensed Entity in the defense of any such action; (ii) Company or the applicable Licensed Entity shall control any legal proceeding subject to this Section 8.D; provided; provided, however, that University's failure to promptly notify Company and such other Licensed Entities shall relieve Company and the other Licensed Entities of their obligations under this Section 8.D to the extent Company or the applicable Licensed Entity is actually prejudiced by such failure; (iii) University will be entitled to participate at its option and expense through counsel of its own selection, and may join, in any legal actions related to any such claims, demands, losses, damages, costs, expenses and penalties; and (iv) no Indemnified Person will enter into any settlement of any indemnified claim without the prior written consent of Company and any Licensed Entity required to indemnify such Indemnified Person with respect to such claim. No Licensed Entity will enter into any settlement adversely affecting any rights or obligations of any Indemnified Person or which includes an express or implied admission of liability, negligence or wrongdoing by any Indemnified Person, without the prior written consent of such Indemnified Person.

D. Assumption of Risk.

As between the Parties, the entire risk as to the Licensed Entities' performance, safety and efficacy of any subject matter claimed in any Licensed Patent, the Technical Information and of any Licensed Product is assumed by the Company on behalf of the Licensed Entities. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT (EXCEPT THE LAST SENTENCE OF THIS SECTION 8.E), (A) UNIVERSITY WILL NOT BE LIABLE TO ANY LICENSED ENTITY OR ANY OTHER PERSON OR ENTITY FOR INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR ANY OTHER INDIRECT DAMAGES OR LOSSES OF ANY KIND OR NATURE, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCTS OR STRICT LIABILITY OR ANY OTHER FORM OF ACTION, WITH RESPECT TO THIS AGREEMENT; AND (B) IN NO EVENT WILL UNIVERSITY'S TOTAL AGGREGATE LIABILITY UNDER THIS AGREEMENT EXCEED THE [***]. The above limitations on liability apply even though the Indemnified Person may have been advised of the possibility of such injury, loss or damage. Company shall not, and shall obligate all other Licensed Entities not to, make any agreements, statements, representations or warranties or accept any liabilities or responsibilities whatsoever, on behalf of University, with regard to any person or entity which are inconsistent with this Section 8.E. The foregoing limitations shall not apply with respect to a breach by University of (i) Section 8.B, (ii) the CDA or the Option Agreement prior to the Effective Date, (iii) any of the exclusive licenses granted to Company hereunder or (iv) the provisions of Schedule G.

E. Insurance.

Company shall, and shall obligate each other Licensed Entity to agree to, continuously maintain during the term of this Agreement and for [***] beyond, liability insurance that will cover its obligations hereunder, including any claims for bodily injury, property, or other damage, in each case alleged to relate to the applicable Licensed Entity's activities undertaken in connection with this Agreement, Licensed Patents, or Licensed Products, including the development, manufacture, use, sale or other disposition of Licensed Products by such Licensed Entity and all activities associated therewith. Each Licensed Entity shall list University and its Affiliates, at such Licensed Entity's expense, as additional insureds under each liability insurance policy (including excess or umbrella liability policies) that such Licensed Entity has or will obtain, that includes any coverage of claims relating to Licensed Products. Such insurance will be primary and noncontributory to any insurance University and its Affiliates may have. At University's request, Company shall supply University from time to time with copies of each such policy, and shall notify University in writing at least [***] prior to any termination of or change in coverage under any such policies.

9. **Miscellaneous**

A. Marking.

Company shall mark all Licensed Products (or their packaging, as appropriate) sold, offered for sale, imported, or otherwise disposed of in such a manner not inconsistent with the requirements of the patent laws and practices of the country to which such products are shipped or in which such products are manufactured or sold, including, if in the U.S., 35 U.S.C. § 287.

B. Export Regulations.

Without limiting Section 8.A, Company shall comply with United States export control and asset control laws, regulations, and orders, as they may be amended from time to time, applicable to the export, re-export, or import of goods or services, including software, processes, or technical data to foreign countries. Such regulations include but are not limited to the International Traffic in Arms Regulations (22 C.F.R. § 120 et seq.), the Export Administration Regulations (15 C.F.R. § 730 et seq.), the regulations administered by the Treasury Department's Office of Foreign Assets Control (31 C.F.R. § 500 et seq.), and the Anti-Boycott Regulations (15 C.F.R. § 760).

C. Entire Agreement, Amendment.

This Agreement together with the schedules attached hereto constitutes the entire agreement between the Parties regarding the subject matter hereof, and supersedes all prior written or oral agreements or understandings (express or implied) between them concerning the same subject matter, including the Option Agreement, the MTA and the CDA in their entirety (including any provisions stated to survive the expiration or termination thereof); provided, however, that any SRA shall continue in accordance with its terms but shall not supersede, limit or amend any of Company's or University's rights under this Agreement. In entering into this Agreement, no Party has relied upon another person's statement, representation, warranty or agreement except for those expressly contained in this Agreement. The only conditions precedent to this Agreement's effectiveness are those expressly stated in it. This Agreement cannot be amended or modified except in a document signed by duly authorized representatives of each Party.

D. Notice.

Any notice required or otherwise made under this Agreement will be in writing, sent by registered or certified mail properly addressed, or by facsimile with confirmed answer-back, to the other Party at the address set forth below or at such other address as may be designated by written notice to the other Party. Notice will be deemed effective three (3) business days following the date of sending such notice if by mail, on the business day following deposit with an overnight courier, if sent by overnight courier, or upon confirmed answer-back if by facsimile.

If to University:
Technology Commercialization
Polsky Center for Entrepreneurship and Innovation
The University of Chicago
1452 E 53rd St, 2nd floor
Chicago, Illinois 60615
Facsimile Number: [***]
Attention: Director

If to Company:
Pyxis Oncology, Inc.
800 Boylston Street
Boston, MA 02199
Attention: CEO

E. Assignment.

This Agreement will be binding on the Parties and upon their respective permitted successors and assigns and inure to the benefit of the Parties and their respective permitted successors and assigns. Company may at any time, upon written notice to University, assign or transfer this Agreement to a successor to all or substantially all of its business pertaining to this Agreement. Any such assignment will be conditioned on and will not be effective until the assignee or transferee has executed and delivered a written agreement assuming and undertaking all of the duties and obligations of Company under this Agreement, unless such assumption occurs by operation of law. Except as provided above or elsewhere in this Agreement, Company shall not assign, transfer or delegate any right or obligation hereunder without the prior written consent of University. Any attempted conveyance by a Party in violation of any term of this Agreement will be null and void. University may assign or transfer this Agreement and its rights and obligations hereunder at any time to any third party to which it also assigns all right, title and interest in and to the Licensed Patents and Technical Information, on written notice to Company. In the event of any such assignment by University, the assignee will be substituted for University as a party hereto, and University will no longer be bound hereby with respect to obligations arising thereafter.

F. Governing Law.

Illinois law (without regard to any jurisdiction's conflict-of-laws principles) exclusively governs all disputes, claims or causes of action between the Parties arising out of or relating to this Agreement as well as the interpretation, construction, performance and enforcement of this Agreement. To the extent, consistent with Section 9.G, that either Party brings any claim against the other Party in a court of law or equity, such Party will bring such claim in the U.S. District Court for the Northern District of Illinois situated in Cook County, Illinois (applying the applicable patent law, as relevant), and each Party shall submit to the exclusive jurisdiction of such court, and waives any objection to venue, for such purposes.

G. Arbitration.

[***].

H. Independent Contractors.

The Company is an independent contractor under this Agreement. This Agreement does not, is not intended to, and will not be construed to, establish a partnership or joint venture, nor does this Agreement create or establish an employment, agency or any other relationship. Company has no right, power or authority, nor shall it represent itself or allow another Licensed Entity to represent itself as having any authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the University, or otherwise act as an agent for the University for any purpose.

I. No Use of Name.

University and Company shall not use, and Company shall obligate each other Licensed Entity not to use, the name, insignia, or symbols of the other in any publicly disclosed commercial activity, marketing, advertising or sales brochures except with the prior written consent of such

other Party, which consent may be granted or withheld at such other Party's sole discretion; provided, however, that nothing herein shall prevent Company or any Licensed Entity from disclosing factual information regarding the licenses granted under this Agreement or the activities of the Licensed Entities with respect to Licensed Products. Company agrees not to use, and shall obligate each other Licensed Entity not to use, the name of any University employee(s) in any commercial activity, marketing, advertising or sales brochures, except with such University employee's consent.

J. Waiver.

No term or provision of this Agreement will be waived and no breach excused unless such waiver or consent is in writing and signed by the Party claimed to have waived or consented. No waiver of a breach will be deemed to be a waiver of a different or subsequent breach. No delay in enforcing a term or provision will be deemed a waiver thereof.

K. Construction.

Each Party has consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement will be construed without regard to the Party or Parties responsible for the preparation of the same and will be deemed as prepared jointly by the Parties. Any ambiguity or uncertainty existing herein will not be interpreted or construed against any Party because it participated in the drafting of this Agreement. No course of dealing, course of performance, or usage of trade may be considered in the interpretation or enforcement of this Agreement. Both Parties waive any right they may have to introduce any such evidence.

L. Execution.

This Agreement may be executed by the Parties in any number of identical counterparts, each of which, for all purposes will be deemed to be an original, and all of which will constitute, collectively, one instrument.

M. Severability.

If any provision of this Agreement is held to be invalid, illegal, unenforceable, or in conflict with any laws of any federal, provincial, state, or local government that may exercise jurisdiction over this Agreement, the validity and enforceability of the remaining portions or provisions will not be affected thereby nor the validity and enforceability of such provision where valid, legal, enforceable and not in such a conflict. Any invalid or unenforceable provision will be promptly reformed by the Parties to effectuate their intent as evidenced on the Effective Date.

N. Third Party Beneficiaries.

Except with respect to Section 7.E,viii, Section 8.D or as otherwise expressly set forth in this Agreement, all rights, benefits and remedies under this Agreement are solely intended for the benefit of University and Company, and no other person or entity will have any rights whatsoever to (i) enforce any obligation contained in this Agreement; (ii) seek a benefit or remedy for any breach of this Agreement; or (iii) take any other action relating to this Agreement under any legal theory, including but not limited to, actions in contract, tort (including but not limited to negligence, gross negligence and strict liability), or as a defense, setoff or counterclaim to any action or claim brought or made by the Parties.

O. Force Majeure.

If a Party is prevented from or delayed in the performance of any of its obligations hereunder by reason of acts of God, war, strikes, riots, storms, fires, earthquake, power shortage or failure, failure of the transportation system, or any other cause whatsoever beyond the reasonable control of such Party ("***Force Majeure Event***"), such Party shall be excused from the performance of any such obligation during a period that is reasonable in light of the Force Majeure Event, but no less than the duration of the Force Majeure Event itself.

P. Interpretation.

Except as the context may otherwise require, (i) references to a Section or Schedule means a Section of, or a Schedule to, this Agreement and all subsections thereof, unless another agreement is specified; (ii) references to a particular law mean such law as in effect as of the relevant time, including all rules and regulations thereunder and any successor law in effect as of the relevant time, and including the then-current amendments thereto; (iii) words in the singular or plural form include the plural and singular form, respectively; (iv) the word "or" has the inclusive meaning that is typically associated with the phrase "and/or"; (v) the terms "including," "include(s)" and "e.g." mean including the generality of any description preceding such term and will be deemed to be followed by "without limitation"; (vi) whenever this Agreement refers to a number of days, such number will refer to calendar days unless business days are specified, and if a period of time is specified and dates from a given day or business day, or the day or business day of an act or event, it is to be calculated exclusive of that day or business day; (vii) a "business day" is a day other than (a) a Saturday, (b) a Sunday or (c) a day on which the banks in Boston, Massachusetts or Chicago, Illinois are permitted to be closed; (viii) any reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein); (x) the words "hereof," "herein," "hereby" and derivative or similar words refer to this Agreement (including any Schedules); and (xi) "unaffiliated third party" means a third party that is not an Affiliate of any Licensed Entity. University agrees and acknowledges that any projections disclosed by Company or any Licensed Entity to University are non-binding and need not be disclosed to University if any Licensed Entity is subject to the Securities Act of 1933, the Securities and Exchange Act of 1934, or the rules or regulations of Nasdaq or any securities exchange.

Q. Confidentiality.

The Parties shall comply with the provisions of Schedule G.

R. Timely Countersignature.

The terms and conditions of this Agreement shall, at University's sole option, be considered by University to be withdrawn from Company's consideration and the terms and conditions of this Agreement, and the Agreement itself to be null and void, unless this Agreement is executed by Company and a fully executed original is received by University within [***] from the date of University signature found below.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties hereto have caused this agreement to be executed by their respective duly authorized officers or representatives on the Effective Date.

The University of Chicago

By: /s/ Jay Schrankler
Jay Schrankler
Associate Vice President
Head of the Polsky Center
for Entrepreneurship and Innovation

Date of signature: 04/17/2020

Pyxis Oncology, Inc.

By: /s/ Lara Sullivan
Lara Sullivan, M.D.
Chief Executive Officer

Date of signature: 04/15/2020

[Signature Page to Exclusive License Agreement]

Schedule A

Licensed Patents

[***]

Schedule B

Technical Information

[***]

Schedule C

Unique Targets

[***]

Schedule D

UNIVERSITY OF CHICAGO ROYALTY REPORT

[***]

Schedule E

Product Development Plan

[***]

Schedule F

Progress Report Form

[***]

Schedule G

Confidentiality

1. “Confidential Information” means all information, data, plans, materials, know-how, processes, methods, protocols, procedures, formulations whether written or oral, disclosed by a Party (the “discloser”) to the other Party (the “recipient”) regarding (a) with respect to University as the discloser, technologies developed by Dr. Thomas Gajewski or members of his laboratory, and including related business, financial or technical information, blueprints, devices, prototypes, software (which includes source codes, object codes and derivatives thereof), patent applications and biological materials, if any, or (b) with respect to Company as the discloser, any business, financial or technical information of Company or any other Licensed Entity, which information, in each of (a) and (b), is marked as confidential or should, under the circumstances, reasonably be considered confidential information of the discloser. In addition, “Confidential Information” includes (x) any “Proprietary Information” (as defined in the CDA) that is not, as of the Effective Date of this Agreement, subject to Section 5 of the CDA, and (y) the terms and conditions of this Agreement.

2. Each Party agrees not to use the other Party’s Confidential Information except to perform its obligations and exercise its rights under this Agreement. In addition, each Party agrees to hold all of the other’s Confidential Information in confidence and agrees not to publish, disclose or disseminate the same to any other person or entity except as specified herein. Each Party may disclose the other’s Confidential Information to its actual or potential directors, officers, employees, consultants, investors, acquirers, Affiliates, Sublicensees, financing sources and advisors who are bound by confidentiality obligations no less protective of the other’s Confidential Information than this Schedule G and only to the extent that such disclosures are necessary for the purpose of this Agreement or for recipient’s formation, fund-raising, acquisition or other corporate activities related to this Agreement. Each Party agrees to be responsible for any disclosure by its actual or potential directors, officers, employees, consultants, investors, acquirers, Affiliates, Sublicensees, financing sources and advisors. The recipient agrees to preserve the confidentiality of the discloser’s Confidential Information with the same reasonable degree of care which the recipient uses to protect its own confidential and proprietary information.

3. Notwithstanding anything herein to the contrary, the recipient may disclose the discloser’s Confidential Information to the extent required to comply with a court order or administrative subpoena or order which appears to be lawful on its face, or to comply with securities laws or other applicable law or the rules of Nasdaq or any securities exchange, provided that the recipient gives the discloser timely notice, where possible, of the contemplated disclosure so as to give the discloser an opportunity to intervene to preserve the confidentiality of the information. In any such event, the recipient will use its reasonable efforts to ensure that all the discloser’s Confidential Information that is so disclosed will be accorded confidential treatment.

4. In addition, Company and University may issue mutually agreed press release(s) on the Effective Date. Nothing herein shall prohibit Company or any other Licensed Entity from disclosing its activities under this Agreement, as long as such disclosure does not include the Confidential Information of University.

5. Confidential Information excludes any information that is: (i) in publicly known or subsequently becomes publicly known through no improper act of the recipient; (ii) subsequently acquired by the recipient from a third person having no contractual, legal or fiduciary obligation of confidentiality to the discloser known to the recipient; (iii) known to the recipient at the time of disclosure, as established by competent written proof; or (iv) developed independently by or on behalf of the recipient, without reliance on or use of the discloser's Confidential Information.

6. The obligations of the parties under this Schedule G will survive for [***].

7. It is further understood and agreed that money damages would not be a sufficient remedy for any breach of this Schedule G by the recipient and that the discloser will be entitled to equitable relief, including injunction and specific performance, as a remedy for any such breach. Such remedies will not be deemed to be the exclusive remedies for a breach by the recipient of this Schedule G but will be in addition to all other remedies available at law or equity.

SCHEDULE H

GLOSSARY

Defined Term	Section
Affiliate	Defined in Section 1; first used in Section 1 (Licensed Entity); numerous
Agreement	Defined in Preamble; numerous
Bayh-Dole Act	Defined in Section 2.G.i; also used in Section 2.G.ii.
Calendar Quarter	Defined in Section 1; first used in Section 1 (Net Sales); numerous
CDA	Defined in Section 1; first used in Section 8.E., also used in Section 9.C. and Schedule G.
Change of Control	Defined in Section 1; used in Section 1 (SRA)
Combination Product	Defined in Section 1 (Net Sales); also used in Section 1 (Net Sales E.v.)
Commencement	Defined in Section 1; first used in Section 3.E.i., also used in Section 3.E.ii. and Section 3.E.iii.
Common Stock	Defined in Section 3.A.
Company	Defined in Preamble; first used in Section 1 (Affiliate); numerous
Confidential Information	Defined in Schedule G(1); first used in Section 1; numerous
Dispute	Defined in Section 9.G.i; first used in Section 9.G.ii.; numerous
Effective Date	Defined in Section 1; first used in Section 1 (Unique Target); numerous
Field	Defined in Section 1; first used in Section 2.A.i.; also used in Section 6.A.ii, and Section 6.D.
First Commercial Sale	Defined in Section 1; first used in Section 3.B.v.; Numerous
Flow-Down Provisions	Defined in Section 2.D; also used in Section 2.I.
Force Majeure Event	Defined in Section 9.O.
Gross Price	Defined in Section 1; first used in Section 1 (Net Sales); also used in Section 1 (Net Sales E.i.)
IND	Defined in Section 1; also used in Schedule E
Indemnified Persons	Defined in Section 8.D.i.; also used in Section 8.D.ii. and Section 8.E.
Indication	Defined in Section 1; also used in Section 3.E.vi. and Section 3.E.vii.
Infringement	Definite in Section 6.D.i.; first used in Section 1 (Sublicense Revenue); numerous
Interact With	Defined in Section 1 (Licensed Product); also used in Section 1 (Unique Target)
Inventions	Material Transfer Agreement
Licensed Component	Defined in Section 1 (Net Sales E.v.); used in Section 1 (Net Sales E.v.)

Licensed Entity	Defined in Section 1; first used in Section 1 (First Commercial Sale); numerous
Licensed Patents	Defined in Section 1; first used in Section 1 (Licensed Entity); numerous
Licensed Product	Defined in Section 1; first used in Section 1 (Commercial Sale); numerous
Materials	Defined in Section 1; first used in Section 1 (Licensed Product); numerous
Materials Licensed Product	Defined in Section 1; first used in Section 1 (Net Sales); numerous
Materials Royalty	Defined in Section 3.B.v.; also used in Section 3.B.iv and Section 3.B.vii.(z).
MTA	Defined in Section 1; first used in Section 1 (Licensed Patents); also used in Section 1 (Material), Section 1 (Technical Information), and Section 9.C.
Net Sales	Defined in Section 1; first used in Section 1 (Net Sales); numerous
Non-Commercial Research Purposes	Defined in Section 1; first used in Section 2.E.
Option Agreement	Defined in Section 1; also used in Section 6.B.i., Section 8.E., and Section 9.C.
Other Component	Defined in Section 1 (Net Sales E.v.); used in Section 1 (Net Sales E.v.)
Party	Defined in Preamble; numerous
Patent Costs	Defined in Section 6.B.; First Used in Section 6.A.ii.; Numerous
Phase I Clinical Trial	Defined in Section 1; used in Section 3.E.i.
Phase II Clinical Trial	Defined in Section 1; used in Section 3.E.ii.
Phase III Clinical Trial	Defined in Section 1; used in Section 3.E.iii.
Royalty Period	Defined in Section 3.B.v.; first used in Section 3.B.iv; numerous
Service Payments	Defined in Section 1 (Sublicense); also used in Section 5.A.
SRA	Defined in Section 1; first used in Section 1 (Licensed Patents; also used in Section 1 (Technical Information), Section 2.B.i.4, Section 2.B.i.5., and Section 9.C.
Subject Invention	Defined in Section 2.G.i.
Sublicense	Defined in Section 1; first used in Section 1 (Sublicense Revenue); numerous
Sublicense Revenue	Defined in Section 1; first used in Section 3.G.
Sublicensee	Defined in Section 1; first used in Section 1 (Licensed Entity); numerous
Technical Information	Defined in Section 1; first used in (Licensed Product(iii)(d)); numerous
Territory	Defined in Section 1; first used in Section 2.A.i; also used in Section 2.A.ii, and Section 6.D.i.

UCMC	Defined in Section 2.E.
Unique Target Royalty	Defined in Section 3.B.ii; also used in Section 3.B.ii., Section 3.B.iv., and Section 3.B.vii.(y).
Unique Target(s)	Defined in Section 1; first used in Section 1 (Licensed Products); numerous
University	Defined in Preamble; first used in Section 1; numerous
Valid Claim	Defined in Section 1; first used in Section 1 (Licensed Product); numerous
Valid Claim Licensed Product	Defined in Section 1 (Licensed Product); first used in Section 1 (Net Sale); numerous
Valid Claims Royalty	Defined in Section 3.B.1.; also used in Section 3.B.iv. and Section 3.B.viii(x).

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

Execution Copy

THIS LICENSE AGREEMENT (the "**Agreement**") is made on 1 December, 2020 ("**Effective Date**")

BETWEEN:

(1) **Pyxis Oncology, Inc.**, a company organized and existing under the laws of Delaware, whose office is 35 CambridgePark Drive, Cambridge, MA 02140 ("**Pyxis**"); and

(2) **LEGOCHEM BIOSCIENCES INC.**, a corporation registered in the Republic of Korea, whose registered office is at 8-26 Munpyeongseo-ro Daedeok-gu Daejeon City, 34302, Republic of Korea ("**LCB**", with Pyxis, each a "**Party**").

RECITALS

(A) LCB is a biopharmaceutical company based in The Republic of Korea focusing on the development of linkers, toxins, and conjugation technologies useful in the manufacture and development of antibody-drug conjugates.

(B) Pyxis is a United States based biopharmaceutical company focused on the development of oncology therapeutics.

(C) LCB has a preclinical-stage ADC program designated by LCB as LCB67 (as further defined below), targeting DLK-1.

(D) Pyxis wishes to obtain a license to LCB's intellectual property directed to LCB67 and to Develop, and Commercialize LCB67 for the benefit of both Parties.

(E) LCB and Pyxis will simultaneously enter into an Opt-In, Investment and Additional Consideration Agreement.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretation

In the Agreement, the following words and expressions have the following meanings:

(a) "**Accounting Standards**" means the IFRS (International Financial Reporting Standards) or GAAP or, if not applicable, any similar accounting standard, in each case, as generally and consistently applied throughout the relevant organization.

(b) "**ADC**" or "**Antibody Drug Conjugate**" means an antibody conjugated to a cytotoxic payload.

(c) "**Affiliate**" means with respect to a legal entity, any other legal entity that directly or indirectly controls, is controlled by or is under common control with such legal entity; where "control", and with correlative meanings, "controlled by" and "under common control with", shall mean: (i) the possession, directly or indirectly, of the power to direct the management or policies of a company or person, whether through the ownership of voting securities, by contract or otherwise; or (ii) the ownership, directly or indirectly, of over 50% of the outstanding voting securities or other ownership interest of a legal entity. Notwithstanding the foregoing, Longwood Fund IV, L.P., Agent Capital Fund I LP, Bayer Healthcare LLC, Ipsen Farmaceutica BV and the affiliates of each of the aforementioned entities shall not be considered an Affiliate of Pyxis for the purposes of this Agreement.

(d) "**Annual Net Sales**" means with respect to all Licensed Products, the worldwide Net Sales calculated on an aggregate basis for a given Calendar Year.

(e) "**Annual Report**" has the meaning set forth in Section 4.4 (Annual Report).

(f) "**Antibody IP**" means the Know-How and Patent Rights owned by Y-Biologics Inc. and exclusively licensed to LCB for use in ADCs directed to the monoclonal anti-DLK1 antibody within LCB67 and any improvements, modifications, or derivatives thereof made under the Agreement, which Patent Rights are set forth in Schedule 1(f).

(g) "**Arising IP**" means Intellectual Property Rights generated by or on behalf of Pyxis or LCB or their respective Affiliates or, in the case of Pyxis, a Sublicensee, in each case, in the performance of any activities under the Agreement during the Term and which specifically relates to Licensed Product or Licensed Compound. For clarity, Arising IP excludes LCB Background IP, Pyxis Background IP and Antibody IP.

(h) "**Batch**" means a specific quantity of Clinical Supply Product that is produced according to a single manufacturing order during the same cycle of Manufacture and intended to have uniform character and quality.

(i) "**BLA**" means a Biologics License Application submitted to the FDA pursuant to 42 U.S.C. § 262 and 21 C.F.R. Part 601 for purposes of obtaining Regulatory Approval for a new biologic in the United States, or any equivalent filing in a country or regulatory jurisdiction other than the United States.

(j) "**Business Day**" means Monday to Friday (inclusive) except bank or public holidays in Massachusetts, United States or Seoul, Korea, and "**Day**" means any period of 24 consecutive hours commencing at 12:01 a.m. Eastern time and concluding at midnight including Business Days, weekends and bank or public holidays.

(k) "**Calendar Quarter**" shall mean the three-month period ending on March 31, June 30, September 30 and December 31 of each calendar year.

(l) "**Calendar Year**" shall mean four (4) consecutive Calendar Quarters beginning with the three-month period ending on March 31st.

(m) [***].

(n) "**CDA**" mean that certain Mutual Confidentiality Agreement made as of June 22, 2020, by and between LCB and Pyxis, as amended.

(o) "**Change of Control**" means, with respect to a Party, (a) a merger, consolidation, reorganization, amalgamation, arrangement, share exchange, tender or exchange offer, private purchase, business combination or other transaction of such Party with a Third Party that results in the voting securities of such Party outstanding immediately prior thereto, or any securities into which such voting securities have been converted or exchanged, ceasing to represent more than fifty percent

(50%) of the combined voting power of the surviving entity or the parent of the surviving entity immediately after such merger or consolidation, (b) a transaction or series of related transactions in which a Third Party, together with its Affiliates, becomes the direct or indirect beneficial owner of more than fifty percent (50%) of the combined voting power of the outstanding securities of such Party, or (c) the sale or other transfer to a Third Party of all or substantially all of such Party's and its controlled Affiliates' assets. Notwithstanding the foregoing, any transaction or series of transactions effected for the primary purpose of financing the operations of the applicable Party or changing the form or jurisdiction of organization of such Party will not be deemed a "Change of Control" for purposes of the Agreement.

(p) "**Claims**" has the meaning set forth in Section 9.3 (Indemnification).

(q) "**Clinical Supply Product**" means Licensed Product in filled or finished form, as applicable, for use in Development of Licensed Products in the Field in the Pyxis Territory.

(r) "**CMC**" means the Chemistry, Manufacturing and Controls portion of the IND or NDA for a pharmaceutical or biologic product in the United States, Europe, China or equivalent or similar portion of an IND, NDA or Regulatory Approval in another regulatory jurisdiction.

(s) "**CMO**" means a contract manufacturing organization.

(t) "**Combination Product**" means a Licensed Product whether combined in a single formulation or package with any Other Components, or formulated or packaged separately but required pursuant to approved product labelling to be used with any Other Component and sold together with such Other Component for a single price.

(u) "**Commercialization**" means any and all activities directed toward obtaining pricing and reimbursement approvals, marketing, promoting, distributing, importing, exporting, selling or offering to sell a pharmaceutical or biologic product, excluding activities directed to Development, Manufacturing, or Medical Affairs, and "**Commercialize**" and "**Commercializing**" shall have a corresponding meaning.

(v) "**Commercially Reasonable Efforts**" means, the efforts and resources that are substantially similar to the efforts and resources that a reasonable Third Party pharmaceutical company of the size of, and with the resources available to the relevant Party (or where applicable, its Sublicensee) would typically devote to a pharmaceutical or biologic product of similar market potential at a similar stage in Development or Commercialization, taking into account all relevant factors, including technical, medical, efficacy, safety, manufacturing, and the patent and other proprietary position of the pharmaceutical or biologic product, and the regulatory environment; and requiring that the Party (1) assigns a budget and responsibility for such obligations to employees or contractors as the case may be, who are held accountable for progress and monitoring such progress, and (2) set and seek to achieve specific objectives for carrying out such obligations. Commercially Reasonable Efforts shall be deemed not to be made if a Party suspends Development of the one Licensed Product required to be Developed pursuant to Section 4.1, for [***] or more in the absence of a Technical Failure or significant scientific evidence that the Licensed Product will unreasonably impact patient safety.

(w) "**Competent Authority**" means any local or national agency, authority, department, inspectorate, minister, ministry official, or public or statutory person (whether autonomous or not) of any government of any country having jurisdiction over the manufacture, sale, or use of pharmaceutical or biologic products, including the United States Food and Drug Administration (FDA), Health Canada, the European Medicines Agency of the European Union (EMA), the National Medical Products Administration (NMPA) of China, the European Commission and the European Court of Justice, or any equivalent agency in any other jurisdiction.

(x) "**Confidential Information**" means the terms of the Agreement and any and all information of a confidential or proprietary nature that is obtained directly or indirectly by one Party (the "**Receiving Party**") or its Affiliates, from the other Party (the "**Disclosing Party**") or its Affiliates at any time on or after the Effective Date, without regard to the form or manner in which such information is recorded, preserved, disclosed or obtained. In addition, Confidential Information shall include all Confidential Information (as defined under the CDA between the Parties) obtained by either Party pursuant to the CDA relating to the Licensed Compound or Licensed Product, which shall be deemed to be Confidential Information obtained by such Party pursuant to the Agreement (and the use and disclosure of which shall, as from the Effective Date, be governed by the terms of the Agreement). LCB Background IP shall be LCB's Confidential Information for which LCB shall be the Disclosing Party and Pyxis shall be the Receiving Party.

(y) "**Cover**", "**Covering**" or "**Covered**" means, with respect to a product, technology, process or method, that, in the absence of ownership of, or a license granted under, a Valid Claim, the practice or Exploitation of such product, technology, process or method would infringe such Valid Claim (or, in the case of a Valid Claim that has not yet issued, would infringe such Valid Claim if it were to issue).

(z) "**Development**" means all internal and external development, and regulatory activities related to a pharmaceutical or biologic product, including (i) non-clinical testing, toxicology, testing and studies, non-clinical and preclinical animal studies, and clinical trials, and (ii) preparation, submission, review, and development of data or information for the purpose of submission to a Competent Authority to obtain authorization to conduct clinical trials and to obtain, support, or maintain Regulatory Approval of a pharmaceutical or biologic product, but excluding activities directed to Manufacturing, Medical Affairs or Commercialization, and "**Develop**" and "**Developing**" shall have a corresponding meaning.

(aa) "**Europe**" means the countries and territories in Europe, including the United Kingdom and members of the European Union.

(bb) "**Exploit**" means to make, have made, use, offer to sell, sell, Develop, Manufacture, perform Medical Affairs activities, Commercialize, or otherwise exploit; and "**Exploitation**" shall have a corresponding meaning.

(cc) "**Extra Milestone Payment**" has the meaning set forth in Section 10.5(a).

(dd) "**Field**" means the treatment of human diseases in all therapeutic and prophylactic areas.

(ee) "**Financing Date**" has the meaning set forth in Section 5.1(b) (Second Payment).

(ff) "**First Commercial Sale**" means, with respect to a Licensed Product in a country or region in the Pyxis Territory, the first sale to a Third Party of such Licensed Product in such country or region after all Regulatory Approvals required to market and sell the Licensed Product in such country or region have been obtained.

(gg) **"First Launch"** means the first offer for sale of Licensed Product.

(hh) "**First Milestone Payment Event**" has the meaning set forth in Section 5.2(a).

(ii) "**Force Majeure**" has the meaning set forth in Section 12.8 (Force Majeure).

(jj) "**Global Development Plan**" means a reasonably detailed written plan prepared by Pyxis setting forth those Development activities, to be completed by Pyxis that are reasonably necessary to obtain or maintain Regulatory Approvals for the Licensed Products in the Pyxis Territory. The Global Development Plan shall include: (i) all key Development activities to be conducted with respect to the Licensed Compound and Licensed Products, (ii) milestones to evaluate the progress of the Licensed Compound and Licensed Products, and (iii) an allocation of responsibilities in relation to the foregoing activities between the Parties, including those responsibilities of Party that will be performed by Subcontractors or Sublicensees. The Global Development Plan shall be updated from time to time, by Pyxis, in its reasonable discretion.

(kk) "**GMP**" shall mean the current good manufacturing practice requirements and standards for the production of drug and biological products, including, as applicable, FDA regulations as set forth in 21 C.F.R. Parts 210, 211, 600, and 610, and related guidance documents, and as interpreted by relevant ICH guidelines, and the applicable laws in any other jurisdiction corresponding to the foregoing; in each case, as amended from time to time.

(ll) "**GMP Clinical Supply Product**" has the meaning set forth in Section 5.1 (Upfront Payment).

(mm) "**ICH**" means the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use.

(nn) "**IND Application**" means an application submitted to a Competent Authority for authorization by the applicable Competent Authority to initiate human clinical trials, including an (i) Investigational New Drug application filed with the US Food and Drug Administration in the United States, (ii) a clinical trial application submitted to the European Medicines Agency of the European Union, (iii) a clinical trial application submitted to the National Medical Products Administration (NMPA) of China, and (iv) any equivalent filing in any other jurisdiction.

(oo) "**Indemnifying Party**" has the meaning set forth in Section 9.3(c).

(pp) "**Indemnitee**" has the meaning set forth in Section 9.3(c).

(qq) "**Indication**" means (1) types of indications by organ/tissue as described on Exhibit 2, and (2) if not set forth in Exhibit 2, any indication for which Pyxis notifies LCB that it has initiated a Phase 3 Clinical Trial or a Phase 2 Clinical Trial that is intended to be a registrational study and which is (i) agreed to by the Parties to be a new Indication on a case-by-case basis, acting in good faith, and (ii) is consistent with the types of Indications described on Exhibit 2.

(rr) "**Initiation**" means for a clinical trial the first dosing of the first patient (or subject in the case of a Phase 1 Clinical Trial) for such trial.

(ss) "**Intellectual Property Rights**" means all Patent Rights, rights to inventions, utility models, copyright and related rights, trademarks, trade names and domain names, rights in goodwill or to sue for passing off, rights in designs, rights in computer software, database rights, rights in confidential information (including Know-How, unpatented technical information, and trade secrets) and any other intellectual property rights, in each case, whether registered or unregistered and including all applications (or rights to apply) for, and renewals or extensions of, such rights and all similar or equivalent rights or forms of protection that may now or in the future subsist in any part of the world.

(tt) "**Japan**" means Japan and its territories and possessions.

(uu) "**Joint Arising IP**" has the meaning set forth in Section 6.1 (Ownership of Arising IP).

(vv) "**Joint Patent Committee**" has the meaning set forth in Section 6.5(a) (Joint Patent Committee).

(ww) "**Joint Steering Committee**" and "**JSC**" have the meaning set forth in Section 4.5(a) (Formation and Purpose).

(xx) "**Know-How**" means any data, results, and information of any type whatsoever, in any tangible or intangible form, including trade secrets, practices, techniques, methods, processes, inventions, discoveries, developments, specifications, formulations, formulae, materials or compositions of matter of any type or kind (patentable or otherwise), software, algorithms, marketing reports, clinical and non-clinical study reports, clinical and non-clinical data, regulatory filings and regulatory submission documents and summaries, technology, test data including pharmacological, biological, chemical, biochemical, toxicological, and clinical test data, analytical and quality control data, stability data, studies and procedures and any other know-how, and any physical embodiments of any of the foregoing.

(yy) "**Knowledge**" shall mean the actual knowledge of the Chief Executive Officer, the Chief Business Development Officer and the Chief Scientific Officer, after reasonable inquiry without additional inquiry or investigation into the prior art or freedom-to-operate of the practice of LCB Background IP or LCB Product-Specific IP.

(zz) "**LCB67**" means an antibody drug conjugate that is directed to DLK-1, having the amino acid sequence set forth on Schedule 1(mmm) or the sequence otherwise specified in the LCB Product-Specific Patent Rights.

(aaa) "**LCB Arising IP**" has the meaning set forth in Section 6.1 (Ownership of Arising IP).

(bbb) "**LCB Background IP**" means the LCB Patent Rights and the LCB Know-How, and Intellectual Property Rights therein, in each case regarding enzymatic conjugation technologies, beta-glucuronide containing linker technologies, and monomethyl auristatin E based prodrug and other proprietary prodrug payload technologies, (i) in existence at the date of the Agreement, (ii) that are owned or controlled or otherwise obtained or generated by LCB independently of the Agreement, and (iii) any related improvements or enhancements that are identified, developed, generated or conceived pursuant to the Agreement which Patent Rights as of the Effective Date are set forth in Schedule 1(bbb).

(ccc) "**LCB Elements**" has the meaning set forth in Section 4.11.

(ddd) "**LCB Indemnitees**" has the meaning set forth in Section 9.3 (Indemnification).

(eee) "**LCB IP**" means LCB Background IP, LCB Know-How, LCB Patent Rights, LCB Arising IP and LCB's interests in Joint Arising IP.

(fff) "**LCB Know-How**" means all Know-How that is (i) owned or controlled by LCB or any of its Affiliates as of the Effective Date or during the Term and (ii) necessary or useful to Exploit the Licensed Compound and Licensed Product in the Field in the Pyxis Territory or otherwise for Pyxis to perform its obligations or exercise its rights under the Agreement.

(ggg) "**LCB Patent Rights**" means all Patent Rights, other than Patent Rights included in the Joint Arising IP or Antibody IP, that are (i) owned or controlled by LCB or any of its Affiliates as of the Effective Date or during the Term and (ii) necessary or useful (or, with respect to patent applications, would be necessary or reasonably useful if such patent applications were to issue as patents) to Exploit the Licensed Compound and Licensed Product in the Field in the Pyxis Territory or otherwise for Pyxis to perform its obligations or exercise its rights under the Agreement; including all LCB Patent Rights as of the Effective Date are set forth on Schedules 1(bbb) (LCB Background Patent Rights) and 1(jjj) (LCB Product-Specific Patent Rights).

(hhh) **"LCB Product-Specific Know-How"** means any and all Know-How (whether or not patentable) controlled by LCB on the Effective Date or during the Term to the extent such Know-How specifically relates to the Licensed Compound or Licensed Product, which must in each case specifically relate in some manner to the anti-DLK-1 antibody of the Licensed Compound.

(iii) **"LCB Product-Specific IP"** means the LCB Product-Specific Know-How and LCB Product-Specific Patent Rights.

(jjj) "**LCB Product-Specific Patent Rights**" means any LCB Patent Rights, other than the LCB Background Patent Rights and the Patent Rights in Antibody IP, having claims that specifically cover Licensed Compound or Licensed Product, which must in each case specifically relate in some manner to the anti-DLK-1 antibody of the Licensed Compound, as of the Effective Date are set forth on Schedule 1(jjj).

(kkk) "**LCB Regulatory Information**" means any information and data that may be in regulatory submissions held by LCB or LCB's CMO or (sub)licensees related to the Manufacture of a Licensed Product in respect of LCB's Background Technology to the extent not specifically related to the Licensed Compound;

(lll) "**LCB Territory**" means Republic of Korea and any country for which the Agreement has been terminated pursuant to Section 10.2 (Termination).

(mmm) "**Licensed Compound**" means (i) LCB67, which is directed to DLK1 and includes [***]

(nnn) "**Licensed Product**" means a pharmaceutical or biologic product containing the Licensed Compound, together with any formulations generated of the Licensed Compound by either Party under the Agreement, whether alone or in combination with one or more Other Components.

(ooo) **"Major Market Territory**" means any of the United States, China, Japan, or any three or more of the following countries: United Kingdom, Spain, France, or Germany.

(ppp) "**Manufacture**" means activities directed to manufacturing, processing, packaging, labelling, filling, finishing, assembly, shipping, storage, or freight of any pharmaceutical or biologic product (or any components or process steps involving such product or any companion diagnostic), placebo, or comparator agent, as the case may be, including quality assurance and stability testing, characterization testing, quality control release testing of drug substance and drug product, quality assurance batch record review and release of such product, process development, qualification, and validation, scale-up, pre-clinical, clinical, and commercial manufacture and analytic development, and product characterization, but excluding activities directed to Development, Medical Affairs, or Commercialization, and "**Manufacturing**" shall have a corresponding meaning.

(qqq) "**Marketing Authorization Application**" means any new drug application, BLA, or other application submitted to a Competent Authority for authorization by the applicable Competent Authority to market and sell a Licensed Product commercially.

(rrr) "**Medical Affairs**" means activities conducted by a Party's medical affairs departments (or, if a Party does not have a medical affairs department, the equivalent function thereof), including communications with key opinion leaders, medical education, symposia, advisory boards (to the extent related to medical affairs or clinical guidance), activities performed in connection with patient registries, and other medical programs and communications, including educational grants, research grants (including conducting investigator-initiated studies), and charitable donations to the extent related to medical affairs and not to other activities that do not involve the promotion, marketing, sale, or other Commercialization of the Licensed Product and are not conducted by a Party's medical affairs (or equivalent) departments.

(sss) "**Milestone**" or "**Milestone Event**" means each of the milestone event specified in Section 5.2 (Development Milestones), Section 5.3 (Regulatory Milestones), and Section 5.4 (Sales Milestones) of the Agreement.

(ttt) "**Milestone Payment**" means the sums due from Pyxis to LCB on achievement of each Milestone Event in accordance with Section 5.2 (Development Milestones), Section 5.3 (Regulatory Milestones), and Section 5.4 (Sales Milestones) of the Agreement.

(uuu) "**Multi-Epitope DLK1**" shall have the meaning set forth in the definition of ROFN Product.

[***] "**Net Sales**" means [***]

[***] [***]

[***] [***]

[***] [***]

[***] [***]

[***] [***]

[***] [***];

[***] [***]

[***]

(A) [***]

(B) [***]

(C) [***]

[***]

(vvv) [***]

(www) "**Other Component**" means any therapeutically active drug or biological ingredient that is not the Licensed Compound (including any product of Pyxis) not covered by LCB IP, Antibody IP, or Joint Arising IP.

(xxx) "**Opt-In Agreement**" means the "Opt-In, Investment and Additional Consideration Agreement" to be executed simultaneously with the Agreement, in the form attached as Exhibit 1 hereto.

(yyy) "**Parties**" means LCB and Pyxis and "**Party**" shall mean either of them.

(zzz) "**Patent Challenge**" means any assertion by Pyxis or any of its Affiliates or Sublicensees or any knowing assistance given to a Third Party in or in preparation for a legal or administrative proceeding or other similar legal proceeding, including with respect to the Patent Trial and Appeal Board and foreign equivalents, challenging the scope, ownership, validity or enforceability of any of the LCB Patent Rights or the Antibody Patent Rights without the permission or consent of LCB.

(aaaa) "**Patent Rights**" means (i) any national, regional or international patent or patent application, including any provisional patent application, (ii) any patent application filed either from such a patent, patent application or provisional application or from an application claiming priority from any of these, including any divisional, continuation, continuation-in-part, provisional, converted provisional, and continued prosecution application, (iii) any patent that has issued or in the future issues from any of the foregoing patent applications ((i) and (ii)), including any utility model, petty patent, design patent and certificate of invention, (iv) any extension or restoration by existing or future extension or restoration mechanisms, including any revalidation, reissue, re-examination and extension (including any supplementary protection certificate and the like) of any of the foregoing patents or patent applications ((i), (ii) and (iii)), and (v) any similar rights, including so-called pipeline protection, or any importation, revalidation, confirmation or introduction patent or registration patent or patent of additions to any such foregoing patent application or patent.

(bbbb) "**Pharmacovigilance Agreement**" has the meaning set forth in Section 4.6(c) (Adverse Event Reporting).

(cccc) "**Phase 1 Clinical Trial**" means the first clinical trial in which a Licensed Product is administered to human subjects under an authorized or otherwise valid and effective IND Application in any country or region.

(dddd) "**Phase 2 Clinical Trial**" means a clinical trial in which a Licensed Product is administered to human subjects, the principal purpose of which is to identify any common short-term side effects and risks associated with the Licensed Product and to evaluate Licensed Product's safety and efficacy in the proposed therapeutic indication, in a manner that is generally consistent with 21 C.F.R. § 312.21(b), as amended (or its successor regulation), or, with respect to any other country or region, the equivalent of such a clinical trial in such other country or region.

(eeee) "**Phase 3 Clinical Trial**" means the first clinical trial in which a Licensed Product is administered to human subjects, that is (ii) designated to produce statistically meaningful data to establish the safety and effectiveness of the Licensed Product for its intended use under specified conditions of use; in a manner sufficient to support a Marketing Authorization Application without any Phase 1 or Phase 2 clinical trials; and (ii) in a manner that is generally consistent with 21 C.F.R. § 312.21(c), as amended (or its successor regulation), or, with respect to any other country or region, the equivalent of such a clinical trial in such other country or region.

(ffff) "**Product Marks**" has the meaning set forth in Section 6.4 (Product Marks).

(gggg) "**Pyxis Arising IP**" has the meaning set forth in Section 6.1 (Ownership of Arising IP).

(hhhh) "**Pyxis Background IP**" means all Patent Rights and Know-How of Pyxis owned or controlled by Pyxis or its Affiliates as of the Effective Date, or arising outside of the scope of the Agreement the Patent Rights in the Pyxis Background IP are set forth on Schedule 1(hhhh).

(iiii) "**Pyxis-Developed Materials**" has the meaning set forth in Section 10.4(d).

(jjjj) "**Pyxis Exclusive License Grant**" has the meaning set forth in Section 10.4(d).

(kkkk) "**Pyxis IP**" means any and all Know-How (whether or not patentable) controlled by Pyxis on the Effective Date or during the Term to the extent such Know-How is (i) incorporated by Pyxis into a Licensed Product or into the Manufacture of the Licensed Product, and (ii) necessary or useful to Exploit the Licensed Compound or Licensed Product in the LCB Territory and all Patent Rights control by Pyxis on the Effective Date or during the Term that claim any such Know-How; Pyxis IP includes Pyxis Arising IP and its interests in Joint Arising IP to the extent (i) incorporated by Pyxis into a Licensed Product or into the Manufacture of Licensed Product, and (ii) necessary or useful to Exploit the Licensed Compound or Licensed Product in the LCB Territory.

(llll) "**Pyxis Indemnitees**" has the meaning set forth in Section 9.3 (Indemnification).

(mmmm) "**Pyxis Territory**" means all of the countries in the world other than LCB Territory.

(nnnn) "**Regulatory Approval**" means, with respect to a country or other jurisdiction, all registrations, authorization or approval by any Competent Authority, necessary for the Licensed Product to be sold in such country or jurisdiction. For clarity, Regulatory Approval may, in a particular country, include pricing approval.

(oooo) "**Regulatory Exclusivity**" means any exclusive marketing rights or data exclusivity rights conferred by any Competent Authority with respect to a Licensed Product in a country, other than a Patent Right but including patent term extension based on FDA or other Competent Authority review times and research times, in each case, that confers exclusive rights to Pyxis, its Affiliates or Sublicensees, as applicable to market such Licensed Product in such country. As an example, and not a limitation of the foregoing definition, as of the Effective Date, Regulatory Exclusivity includes in the U.S., the applicable period of exclusivity for an initial reference product granted under the U.S. Biologics Price Competition and Innovation Act of 2009.

(pppp) "**Representatives**" means the directors, officers, employees, consultants, advisors and permitted contractors of the relevant Party or its Sublicensees.

(qqqq) "**Results**" means all data, information, or materials identified, developed, generated, created, or conceived in the exercise of the Agreement, including all tangible records of such data and information.

(rrrr) [***]

(ssss) "**ROFN Eligible Product**" means any ADC directed to DLK1 (including any bi-specific or multi-specific ADC directed to DLK1 and one or more targets other than DLK1). For clarity, an ADC directed to more than one epitope of DLK1 (a "**Multi-Epitope DLK1**") shall not be deemed a ROFN Eligible Product.

(tttt) "**Royalty Rate**" means the amount of consideration due as calculated in accordance with Section 5.5 (Royalty Payments).

(uuuu) "**Royalty Report**" has the meaning set forth in Section 5.6 (Royalty Reports).

(vvvv) "**Royalty Term**" means, on a country-by-country basis and Licensed Product-by-Licensed Product basis, the period commencing on the date of the First Commercial Sale of such Licensed Product in such country and ending on the latest of:

(i) the date of expiry of the last Valid Claim of a Patent Right included in Antibody IP, Patent Right included in LCB Arising IP, Joint Arising IP or an LCB Patent Right Covering the composition of matter or a method of use of the Licensed Product; or

(ii) ten (10) years from the First Commercial Sale of such Licensed Product in such country; or

(iii) the expiration of Regulatory Exclusivity for such Licensed Product in such country.

(wwww) "**Second Payment**" has the meaning set forth in Section 5.1(b).

(xxxx) "**Selling Entity**" means Pyxis, or its Affiliates, or Sublicensees.

(yyyy) "**Senior Officers**" means for LCB, the President or the Chief Executive Officer of LCB, and for Pyxis, the Chief Executive Officer of Pyxis.

(zzzz) "**Sublicense**" means a grant of rights (or grant of an option to obtain such rights) by Pyxis to a Sublicensee in the Field under any of the rights licensed to Pyxis by LCB under Section 2.1 (Pyxis License) with respect to the Exploitation of the Licensed Compound or Licensed Product. The grant of ordinary course rights to contract research organizations, contract manufacturing organizations and similar vendors shall not be considered a Sublicense.

(aaaaa) "**Sublicense Revenue(s)**" means [***]

(bbbbb) "**Sublicensee**" means (a) a Third Party to which Pyxis grants a Sublicense (b) a Third Party to whom such Third Party defined in the foregoing clause (a) grants a license in the Field under any of the LCB IP (through multiple tiers).

(ccccc) [***]

(ddddd) "**[***]**

(eeeee) "**Technical Failure**" means that the Licensed Product for the Indication for which it is being studied is reasonably determined by the Parties to: (i) be unsafe, based on results of testing; (ii) fail to meet the statutory standard of effectiveness to obtain approval; or (iii) be not feasible to Manufacture for Commercialization, in each case as determined by the Parties in good faith upon reviewing and discussing all pertinent, objective evidence; provided that in the event a dispute between the Parties regarding such determination as discussed in the JSC has lasted longer than [***] rom the date a Party first presents that a Technical Failure has occurred to the other Party at the JSC, Pyxis shall have the right to make the final determination regarding whether a Technical Failure has occurred.

(fffff) "**Term**" has the meaning set forth in Section 10.1 (Term).

(ggggg) "**Third Party**" means a person other than LCB, Pyxis or each of their Affiliates.

(hhhhh) "**United States**" or "**US**" means the United State of America and its territories and possessions.

(iiiii) "**Valid Claim**" means a claim of:

(i) a granted patent that: (A) has not expired; (B) has not been revoked nor held invalid or unenforceable by an administrative agency, court or other government agency of competent jurisdiction in a final and non-appealable decision (or a decision unappealed within the time limit allowed for appeal) nor admitted to be invalid or unenforceable through reissue, re-examination, or disclaimer or otherwise; (C) has not been abandoned, and (D) has not been lost through an interference proceeding, *inter partes* review, *ex partes* re-examination or similar proceeding; or

(ii) a pending patent application that has not been pending for more than [***] from its initial filing date and has not been finally rejected by a patent office or other governmental agency of competent jurisdiction in an unappealable decision or a decision that is un-appealed within the time allowed for appeal.

In the Agreement:

(a) references to Parties, Sections and Schedules are to the Parties, Sections and Schedules of the Agreement

(b) references to persons include all forms of legal entity including an individual, company, body corporate, unincorporated association and partnership, and such persons' successors and assigns;

(c) the words 'include," "including," and "in particular" are to be construed as being by way of illustration or emphasis only and are not to be construed so as to limit the generality of any words preceding them;

(d) the words "other" and "otherwise" are not to be construed as being limited by any words preceding them;

(e) the headings are used for convenience only and do not affect its interpretation;

(f) any financial sums are expressed in US Dollars unless otherwise specified;

(g) the term "or" means "and/or" hereunder;

(h) the word "will" shall be construed to have the same meaning and effect as the word "shall";

(i) "herein," "hereby," "hereunder," "hereof" and other equivalent words refer to the Agreement as an entirety and not solely to the particular portion of the Agreement in which any such word is used;

(j) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein);

(k) the word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under the Agreement;

(l) references to any specific law, rule or regulation, or section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof; and

(m) a reference to the singular includes a reference to the plural and vice versa and a reference to any gender includes a reference to all other genders.

Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of the Agreement. Accordingly, the rule of construction that any ambiguity in the Agreement will be construed against the drafting Party will not apply.

2. Grant of License

2.1 **Pyxis License**. Subject to the terms of the Agreement, LCB hereby grants to Pyxis and its Affiliates, on behalf of itself and its Affiliates:

(a) an exclusive (even as to LCB and its Affiliates), transferable (solely as permitted in accordance to Section 12.3 (Assignment)) license under the LCB Product-Specific IP, the LCB IP and the Antibody IP, with the right to Sublicense through multiple tiers, to Exploit the Licensed Compound and Licensed Product in the Field in the Pyxis Territory except that the foregoing license to Pyxis under LCB IP and Antibody IP applies solely to the Licensed Compound and not to any Other Component; and

(b) a non-exclusive, transferable (solely as permitted in accordance to Section 12.3 (Assignment)) license under the LCB IP and the Antibody IP with the right to sublicense through multiple tiers, to Develop, Manufacture or have Manufactured the Licensed Compound and Licensed Product in the LCB Territory solely to Exploit the Licensed Compound and Licensed Product in the Field in the Pyxis Territory.

2.2 **LCB License**. Subject to the terms of the Agreement, Pyxis hereby grants to LCB and its Affiliates an exclusive (except as to Pyxis for itself and subcontractors under this Agreement), fully-paid, royalty-free, non-transferrable, non-sublicensable (other than to subcontractors acting on behalf of LCB) license under the Pyxis IP to Manufacture and have Manufactured the Licensed Product in the Pyxis Territory solely to the extent reasonably necessary for LCB to (i) perform its obligations under the Agreement, and (ii) Exploit the Licensed Compound and Licensed Product in the LCB Territory.

2.3 **Restrictions**. Pyxis shall not directly or indirectly by virtue of the Agreement or otherwise:

(a) modify, disassemble, decompile, reverse engineer, or attempt to modify, disassemble, decompile or attempt to reverse engineer, the Licensed Compound, including LCB Background IP, Antibody IP or any component of the foregoing; or

(b) engage in any activities in breach of any jurisdiction's export-import or other applicable laws, rules or regulations.

2.4 **Companion Diagnostics**. If during the Term, Pyxis elects to Develop a companion diagnostic for use in conjunction with the Licensed Products or to Develop Licensed Compound or Licensed Product for diagnostic use, it may do so under a separate license to Intellectual Property Rights Controlled by LCB. Such license to include reasonable additional consideration for LCB, which, when taken as a whole, is no greater than the consideration paid to LCB for the Licensed Product under the Agreement, and the Parties will enter (i) an amendment to the Agreement, or (ii) a separate agreement between Pyxis and LCB regarding such license for the companion diagnostics (in the case of each of (i) or (ii) for the purpose of licensing such Intellectual Property Rights to Pyxis).

2.5 [***].

[***]

[***] [***]

2.6 [***]

2.7 [***].

2.8 **Patent Challenge**. In the event of a Patent Challenge, where none of the exceptions in Section 10.2(d) (Termination for Patent Challenge) apply, LCB may elect, in lieu of exercising its right to terminate, to convert the exclusive licenses granted to Pyxis in 2.1 (Pyxis License) to non-exclusive licenses.

3. Sublicensing & Subcontracting

3.1 **Sublicenses by Pyxis**. In the event that Pyxis grants a Sublicense of a Licensed Compound or Licensed Product in the Field pursuant to Section 2.1 (Pyxis License):

(a) Pyxis shall notify LCB of such potential Sublicense (excluding any Subcontractor) in advance of signing such Sublicense agreement including a summary of terms and the relevant financial terms thereof;

(b) Such Sublicense shall be consistent with the terms of the Agreement and require the applicable Sublicensee to comply with applicable obligations of the Agreement including, the obligation to use Commercially Reasonable Efforts to Develop and Commercialize Licensed Compound and Licensed Products;

(c) Pyxis shall within [***] after the Effective Date provide a complete copy of each Sublicense to LCB if permitted by the Sublicense. Pyxis may make reasonable redactions where the redactions do not adversely impact the rights of LCB hereunder, provided the redacted copy fully enables LCB to determine the scope of the rights granted, the financial terms thereunder to the extent applicable to LCB and confirm compliance with and enforce obligations under the Agreement; and

(d) Any Sublicense Revenue Pyxis receives under such Sublicenses will be shared in accordance with the Opt-In Agreement.

3.2 **Subcontracting by Pyxis**. Pyxis will have the right to engage Subcontractors to exercise its rights or perform its obligations under the Agreement, including any activities set forth in the Global Development Plan; *provided* that any such Subcontractor is required to comply with the terms of the Agreement that are applicable to such Subcontractor.

3.3 **Pyxis Remaining Primarily Liable**. Pyxis acknowledges that the grant of any Sublicense shall not relieve Pyxis of its obligations under the Agreement, except to the extent they are performed by any such Sublicensee, and Pyxis will remain responsible for the performance of any of its obligations under the Agreement that are allocated to a Subcontractor or Sublicensee to the same extent as if it had performed (or failed to perform) such obligations itself.

4. Development, Manufacture and Commercialization

4.1 **Development Responsibilities**. Subject to Section 4.5 (JSC) below regarding oversight by the JSC, Pyxis will lead and will have sole control and decision making authority with respect to the Development of the Licensed Compound and Licensed Product in the Pyxis Territory. Pyxis shall provide LCB with the Global Development Plan no later than [***] after the Effective Date. Pyxis shall use Commercially Reasonable Efforts to Develop at least one Licensed Compound and one Licensed Product for at least one Indication in the Pyxis Territory, including by using Commercially Reasonable Efforts to conduct the activities set forth in the Global Development Plan and Developing Licensed Product at least one Indication at one time. For the avoidance of doubt, if Pyxis Develops only one Licensed Product in only one Indication during the Term, Pyxis will be deemed to have met its diligence obligations with respect to Development of the Licensed Product hereunder. Subject to Section 4.5 (JSC) below regarding the oversight by the JSC, LCB will lead and have primary control and decision making authority with respect to the Development of the Licensed Compound and Licensed Product in the LCB Territory**.**

4.2 Pyxis shall be deemed to have used Commercially Reasonable Efforts under Section 4.1, if Pyxis, its Affiliates or a Sublicensee has achieved the following events listed below by the dates set forth below:

(a) Initiate a preclinical toxicology program (GLP) for the Licensed Compound or Licensed Product within [***] after the delivery of the non-GMP-compliant Batch as set forth in Section 5.1 (Upfront Payment);

(b) Submit an IND Application for a Licensed Product within [***]after the completion of such preclinical toxicology program (GLP) in a Major Market Territory;

(c) Dose a first patient in a Phase 1 Clinical Trial for a Licensed Product in a Major Market Territory within [***] after submission of the first IND Application;

(d) Dose a first patient in a Phase 2 Clinical Trial for a Licensed Product in a Major Market Territory within [***]after completion of a Phase 1 Clinical Trial in a Major Market Territory;

(e) Dose a first patient in a Phase 3 Clinical Trial for a Licensed Product in a Major Market Territory within [***] after completion of a Phase 2 Clinical Trial in a Major Market Territory;

(f) Submit a BLA Application for a Licensed Product in a Major Market Territory within [***]after completion of a Phase 3 Clinical Trial; and

(g) Achieve First Commercial Sale of a Licensed Product within [***]after receiving Regulatory Approval.

4.3 **LCB Territory Development Discussion**. LCB shall provide Pyxis an update of LCB's Development of activities including Licensed Products on a quarterly basis at each JSC meeting. If Pyxis reasonably believes that any Development activities proposed by LCB would reasonably be expected to have a material adverse impact upon the Development of the Licensed Product in the Field in the Pyxis Territory, then Pyxis shall have the right to bring the matter to the attention of the JSC setting forth its concerns in a written report along with a proposed resolution, taking into account LCB's interests, and the Parties shall discuss in good faith a resolution to such concern. [***]Further, any action by LCB that adversely or materially affects the Development of Pyxis shall be taken into account when considering whether Pyxis has used Commercially Reasonable Efforts as required under the Agreement.

4.4 **Annual Report**. Pyxis shall provide to LCB a report at least once every 12 months (an "**Annual Report**") that includes:

(a) the progress of Development for the Licensed Compound and Licensed Product measured against the Global Development Plan for each Major Market;

(b) for each Major Market where all required Regulatory Approvals have been obtained for the Licensed Product, at least [***]prior to launch of a Licensed Product in such country or region, a summary of the Commercialization strategy and plan of Pyxis in respect of the Licensed Product in such Major Market; and

(c) the Parties shall discuss the Annual Report and the progress of Commercialization activities as measured against the plan and LCB shall have the opportunity to ask questions of Pyxis and Pyxis shall be reasonably available and, in any event, respond to LCB's questions within [***].

4.5 **Joint Steering Committee (JSC).**

(a) **Formation and Purpose**. Pyxis and LCB will establish and convene a joint steering committee (the "**Joint Steering Committee**" or the "**JSC**") promptly after the Effective Date. The JSC shall consist of representatives from each Party and operate by the procedures in accordance with this Section 4.5 (Joint Steering Committee). The purpose of the JSC shall be to provide a forum for the coordination, communication, and oversight of the Parties' activities under the Development Plan, and the JSC shall not have any decision-making authority outside of the scope contemplated herein.

(b) **JSC Responsibilities**. The JSC's responsibilities shall be to:

(i) Discuss the Global Development Plan and all material amendment and updates thereto;

(ii) Facilitate the exchange of information between the Parties related to the Development of the Licensed Product under the Global Development Plan in the Pyxis Territory and LCB's Development efforts in the LCB Territory;

(iii) Review, discuss, and coordinate the overall progress of the Development activities for the Licensed Compound and Licensed Product conducted under the Global Development Plan and in the LCB Territory;

(iv) Oversee, discuss and coordinate regulatory activities as they pertain to Licensed Product;

(v) Serve as the first forum to hear and resolve disputes in respect of Development matters; and

(vi) Perform such other functions as appropriate to further the Development of the Licensed Compound or Licensed Product, as determined by the Parties in writing.

(c) **JSC Decisions and Actions**. The Parties shall use good faith efforts to achieve consensus regarding any actions. If the JSC fails to reach agreement on a matter before it for decision regarding the Development of Licensed Compound or Licensed Product, Pyxis shall have final decision making authority on such matters in the Pyxis Territory and LCB shall have final decision making authority on such matters in the LCB Territory.

(d) **JSC Membership**. Within [***]after the Effective Date, each Party shall designate two representatives for the JSC and be responsible for its representatives' compliance with the terms of the Agreement and that each representative has agreed in advance to confidentiality, intellectual property ownership and assignment and non-use obligations at least as restrictive as those set forth herein. Each representative shall have the appropriate level of experience in the subject area of the JSC, and at least one representative shall have sufficient seniority within the applicable Party's organization to have the necessary decision-making authority in order for the JSC to fulfill its responsibilities. Either Party may designate a substitute for its JSC representatives if one of such Party's designated representatives is unable to be present at a meeting so long as such substitutes are subject to the same obligations of confidentiality, intellectual property ownership and assignment and non-use as the formal representative. From time to time, each Party may replace its JSC representatives by written notice to the other Party specifying the prior representative(s) and their replacement(s).

(e) **JSC Chairperson**. The JSC will have a chairperson, to be designated by Pyxis. The chairperson shall be responsible for calling and convening meetings. The chairperson (or its designate) shall: (i) prepare and circulate an agenda reasonably in advance of each upcoming meeting; and (ii) prepare and issue minutes of the JSC meeting within [***] hereafter. Such minutes shall not be finalized until each JSC representative reviews and approves such minutes in writing; *provided* that any minutes shall be deemed approved unless a JSC representative objects to the accuracy of such minutes within [***] fter the circulation of the minutes.

(f) **Meetings**.

(i) **Timing and Frequency**. Until the completion of all activities under the Global Development Plan (after which the JSC shall disband) or unless otherwise agreed by the Parties, the JSC shall meet at least once each Calendar Quarter. Additional meetings of the JSC may be held with the consent of each Party (such consent not to be unreasonably withheld, delayed or conditioned), and as required under the Agreement.

(ii) **Meeting Procedures**. The JSC may meet either (A) in person at either Party's facilities or at such locations as the Parties may otherwise agree; or (B) by audio or video teleconference. Each Party shall be responsible for all of its own expenses incurred in connection with participating in the JSC, including all travel and lodging.

(g) **Non-Member Participation**. Additional non-members of the JSC having relevant experience may from time to time be invited to participate in a JSC meeting, *provided* that such participants shall have no voting rights or powers. Non-member participants who are not employees of a Party or its Affiliates shall only be allowed to attend if: (i) the other Party's representatives have consented to the attendance; and (ii) such non-member participant is subject to and has agreed in advance to confidentiality, intellectual property ownership and assignment and non-use obligations at least as restrictive as those set forth in the Agreement.

(h) **Limitation of Authority**. The JSC shall only have the powers expressly assigned to it in this Article 4 and elsewhere in the Agreement and shall not have the authority to: (i) modify or amend the terms and conditions of the Agreement; (ii) waive either Party's compliance with the terms and conditions of the Agreement; (iii) determine any such issue in a manner that would conflict with the express terms and conditions of the Agreement; or (iv) impose any other obligations on either Party without the prior written consent of such Party.

4.6 **Regulatory Matters**.

(a) **Regulatory Responsibilities; Ownership**. Pyxis will lead and have sole control and decision-making authority with respect to all regulatory activities specific to the Licensed Product as a whole, but not activities related to LCB Regulatory Information, in the Pyxis Territory, including all applications for Regulatory Approvals in the Pyxis Territory. Pyxis will have the sole right to conduct all communications with Competent Authorities in the Pyxis Territory, including all meetings, conferences and discussions (including advisory committee meetings), with regard to Licensed Product in the Pyxis Territory, but not LCB Regulatory Information. Pyxis shall involve LCB in all material regulatory matters and coordinate material regulatory activities with LCB for the LCB Territory, including through the oversight of the JSC. LCB shall have the right to review and provide comments on regulatory materials and participate with Pyxis in regulatory meetings, unless prohibited by applicable law, in each

case, as they relate to or involve questions about LCB Background IP or Antibody IP as incorporated in Licensed Product, at LCB's sole cost and expense. Pyxis will own any and all Regulatory Approvals and regulatory submissions for each Licensed Product as a whole in the Pyxis Territory, which will be held in the name of Pyxis or its designees, except for LCB Regulatory Information.

(b) **Right of Reference**. Each Party will grant, and hereby does grant, to the other Party a right of reference to all Regulatory Approvals and related regulatory materials, including the drug master file (or any equivalent thereof outside the United States), for the Licensed Products in the Field submitted by or on behalf of such Party or its Affiliates, solely for the purpose of seeking, obtaining, supporting, and maintaining Regulatory Approvals for the Licensed Products in each Party's respective territory. Each Party will bear its own costs and expenses associated with providing the other Party with the right of reference pursuant to this Section 4.6(b) (Right of Reference), and will take such actions as may be reasonably requested by the other Party to give effect to the intent of this Section 4.6(b) (Right of Reference) and to give the other Party the benefit of the granting Party's Regulatory Approvals and related regulatory materials in the other Party's territory as provided herein.

(c) **Adverse Event Reporting**. No later than [***] after the submission of the first IND application in the Pyxis Territory, Pyxis and LCB shall develop and agree in a written agreement to worldwide safety and pharmacovigilance procedures for the Parties with respect to the Development and Commercialization of Licensed Products, such as safety data sharing and exchange, adverse events reporting, and prescription events monitoring (the "**Pharmacovigilance Agreement**").

4.7 **Commercialization**. Each Party shall lead and have sole control over and decision-making authority with respect to all aspects of Commercialization of the Licensed Products in the Pyxis Territory in the case of Pyxis, and in the LCB Territory in the case of LCB, subject to the terms and conditions of the Agreement. Pyxis shall use Commercially Reasonable Efforts to Commercialize at least one Licensed Product for at least one Indication at one time, following receipt of all Regulatory Approvals therefor in Major Markets in the Pyxis Territory. For the avoidance of doubt, if Pyxis Commercializes only one Licensed Product in only one Indication, Pyxis will be deemed to have met its diligence obligations with respect to Commercialization of the Licensed Product hereunder.

4.8 **Medical Affairs**. Each Party shall lead and have sole control over and decision-making authority with respect to all aspects of Medical Affairs of the Licensed Products in the Pyxis Territory in the case of Pyxis, and in the LCB Territory in the case of LCB, subject to the terms and conditions of the Agreement.

4.9 **Exclusivity; Diversion**.

[***] **Exclusivity Covenant**. During the Term of the Agreement, neither Party shall nor shall their Affiliates and Sublicensees research, in-license, Develop or Commercialize any other ADC directed to DLK-1, including a Multi-Epitope DLK1 or a modification or derivative of [***].

[***] **Diversion Covenant**. Subject to applicable law, LCB and Pyxis each hereby covenants and agrees that (i) it and its Affiliates shall not, and it shall contractually obligate (and use Commercially Reasonable Efforts to enforce such contractual obligation) its licensees, sublicensees and contractors not to, directly

or indirectly, actively promote, market, distribute, import, sell or have sold any Licensed Product, including via the internet or mail order, to any Third Party or to any address or internet protocol address or the like, in the Pyxis Territory in the case of LCB and in the LCB Territory in the case of Pyxis, and (ii) it shall not engage, nor permit its Affiliates, licensees, sublicensees or contractors to engage, in any advertising or promotional activities relating to any Licensed Product for use directed primarily to customers or other buyers or users of such product located in any country or jurisdiction in the Pyxis Territory in the case of LCB and in the LCB Territory in the case of Pyxis, or solicit orders from any prospective purchaser located in any country or jurisdiction in the Pyxis Territory in the case of LCB or in the LCB Territory in the case of Pyxis. As between the Parties, nothing in this Section 4.9(b) will prevent either Party or its Affiliates and licensees from undertaking, or having undertaken, any of the foregoing activities with respect to any Licensed Product in the LCB Territory in the case of LCB and in the Pyxis Territory in the case of Pyxis.

4.10 **Technology Transfer; Exchange of Information**.

(a) **Technology Transfer by LCB**. No later than [***] after the Effective Date, LCB shall disclose to Pyxis all existing and available Product-Specific LCB Know-How and supporting documents including results, data and reports that may be required or useful for the Exploitation of the Licensed Compound and Licensed Product in the Pyxis Territory or otherwise provide such information by the right of reference set forth in Section 4.6(b) (Right of Reference). Thereafter, on an ongoing basis at each meeting of the JSC or as reasonably requested by Pyxis, LCB shall also disclose to Pyxis all Product-Specific LCB Know-How and supporting documents in each case as may be so required or useful, generated after the Effective Date. All of the foregoing Know-How and documents shall be provided, in each case, in English.

(b) **Technology Transfer by Pyxis**. Twice each Calendar Year and as LCB reasonably requests, in each case during the Term, Pyxis shall disclose to LCB all material Results, Regulatory materials, material Know-How incorporated by Pyxis in its Exploitation of the Licensed Product and other supporting documents that are reasonably required or useful for LCB's Exploitation of Licensed Product in the LCB Territory. LCB will be entitled to use the Pyxis Arising IP solely for the purpose of LCB's internal research and the Exploitation of the Licensed Compound and Licensed Product in the LCB Territory.

(c) **Costs of Technology Transfer**. Each Party will be responsible for its internal costs incurred in connection with the technology transfer set forth under this Section 4.10 (Technology Transfer; Exchange of Information). Each Party will reimburse the other Party for the reasonable and verifiable external expenses and costs incurred by or on behalf of such other Party or its Affiliates in connection with the technology transfer set forth under this Section 4.10 (Technology Transfer; Exchange of Information).

4.11 **Manufacturing and Supply**. Prior to the payment by Pyxis for GMP Clinical Supply Product under Section 5.1(c) (Reimbursement of CMC and Product Costs), LCB shall Manufacture or have Manufactured the Licensed Compound and Licensed Products on behalf of Pyxis according to the quantities and timelines set forth in the Global Development Plan; provided that Pyxis shall have full access to documentation relating to such Manufacturing, including true and complete copies of all LCB CMO agreements, the ability to manage and interact directly with LCB CMOs, and final approval and acceptance of any Licensed

Product delivered by LCB, which shall be, in each case, provided to Pyxis in English. Following the payment by Pyxis for GMP Clinical Supply Product under Section 5.1(c) (Reimbursement of CMC and Production Cost), Pyxis shall have the sole right (and shall solely control, at its discretion) itself or with or through its Affiliates, sublicensees, or other Third Parties, to Manufacture or have Manufactured the Licensed Compound and Licensed Products for Development and Commercialization in the Pyxis Territory. All such Manufacturing shall be at Pyxis's sole cost and expense. Notwithstanding the foregoing, the Parties agree that LCB shall control the Manufacture or use of the conjugation methods and materials, linker and payload elements of LCB Background IP (the "**LCB Elements**") and LCB Regulatory Information (other than for the Licensed Compound after the GMP Clinical Supply Product); provided that Pyxis shall have oversight over all such Manufacturing and use. Promptly following the payment for Clinical Supply, LCB shall transfer to Pyxis or its designated CMO (i) all LCB Product-Specific Know-How and all data, information, assets and other materials (including starting materials and research materials, DNA, protein sequences, constructs, cell lines, reagents, antibodies and tissue samples), and GMP and shelf-life information relating thereto, Controlled by LCB or its Affiliates (or Third Party CMOs, to the extent LCB has the right to assign, transfer and/or sublicense such materials under its agreements with such Third Party CMOs; provided, that LCB shall use good-faith efforts to obtain such right), necessary or reasonably useful for Pyxis to Manufacture the Licensed Compound and Licensed Product, in each case as a whole, in the Pyxis Territory, as its sole cost and expense. At the reasonable request of Pyxis from time to time, LCB shall make its employees and consultants (including personnel of its Affiliates and Third Party CMOs) available to Pyxis and its designees to provide reasonable consultation and technical assistance in order to ensure an orderly transfer of such materials and technology to Pyxis and its designees and to assist Pyxis and its designees in the Manufacture of the Licensed Compound or Licensed Products, in each case as a whole. It is expressly acknowledged and agreed by the Parties that Pyxis or its Affiliates may contract directly with Third Party CMOs that Manufacture the Licensed Compounds or Licensed Products, in each case as a whole, on behalf of LCB or its Affiliates, provided however, that the Parties shall cooperate and coordinate in good faith through the JSC as to such matters and LCB shall retain decision making authority in respect of Manufacturing matters concerning the LCB Elements or involving the LCB Regulatory Information, unless such Manufacturing matters are reasonably likely to have a material adverse impact on the safety of the Licensed Products or will delay any material Development activities of Pyxis, its Affiliates or their Sublicensees, in which case the dispute resolution mechanism in the Agreement will apply.

5. Payments

5.1 **Upfront Payments**.

(a) **Initial Payment**. No later than [***] after the Effective Date, Pyxis shall pay to LCB a one-time, non-refundable, payment of $500,000 (Five Hundred Thousand US Dollars).

(b) **Second Payment**. No later than [***] after [***] yxis shall pay to LCB a one-time, non-refundable, non-creditable payment of $9,000,000 (Nine Million US Dollars) (the "**Second Payment**")**.**

(c) **Third Payment.** Subject to Section 4.11, Pyxis shall pay to LCB an additional payment to reimburse LCB's CMC/manufacturing costs, in an amount equal to LCB's costs of goods and invoiced CMO charges, estimated to be [***] ***]. Any increased number of Batches or changes to or additional tests for the manufacturing runs will be as agreed by the Parties and shall be provided to Pyxis at a price to be agreed with LCB.

5.2 **Development Milestones**. Subject to the terms and conditions set forth in the Agreement, Pyxis shall pay to LCB the following one-time, non-refundable, non-creditable payments set forth in the table immediately below for the first achievement by Pyxis or its Affiliates or Sublicensees, of the development milestone events for a Licensed Product in the Field in the Pyxis Territory. [***] or the avoidance of doubt, no payment set forth in this Section 5.2 below shall be payable more than once no matter how many times a Licensed Product achieves an applicable milestone. Milestones are separately due for: (i) each new Indication for any Licensed Product which has previously achieved a milestone for a prior Indication; (ii) any Indication for a different Licensed Product for which Indication such Licensed Product has not previously achieved a milestone for such Indication; or (iii) in the case where a clinical trial milestone has not been achieved for the same Indication for the same Licensed Product, the highest applicable development milestone will be deemed to have been achieved. For example, if one Licensed Product achieves Initiation of a first Phase 1 Clinical Trial for a first Indication achieved by any Licensed Product, a development milestone for Initiation of a first Phase 2 Clinical Trial by a second Licensed Product (even if for a different or the same Indication than the first Indication for the other Licensed Product) a second milestone will be paid. Or, if a Licensed Product achieves Initiation of Phase 3 Clinical Trial, for an Indication for which such Licensed Product has not previously achieved a Phase 3 Clinical Trial development milestone, the payment shall be the highest payment for a Phase 3 Clinical Trial development milestone that has not yet been paid.

[

	Payment (US Dollars)			
Development Milestone Event	**First Indication**	**Second Indication**	**Third Indication**	**Fourth Indication**
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

[***] ach development milestone payment with respect to a particular Indication that is earned but has not been paid, as permitted under sub clause 5.2(b) below, shall be payable upon the first to occur of [***] [***]

[***] [***]

Subject to sub clauses (a) and (b) of this Section 5.2 (Development Milestones), for each Indication, in the event any development milestone event is bypassed and a later development milestone event is achieved for the same Indication, the payments corresponding to any such bypassed development milestone event shall be due at the same time that payment is due for the achievement of such later development milestone event. In the event that submission for Regulatory Approval for an Indication is made without meeting the development milestone events, the payments corresponding to all bypassed development milestone events shall be due at the time of submission for such Indication.

[***]

Regulatory Milestones. Subject to the terms and conditions set forth in the Agreement, Pyxis shall pay to LCB the following one-time, non-refundable, non-creditable payments set forth in the table immediately below for the first achievement by Pyxis or its Affiliates or Sublicensees, of regulatory milestone events for a Licensed Product [***] in the Field in the Pyxis Territory. For the avoidance of doubt, no payment set forth in this Section 5.3 below shall be payable more than once no matter how many times a Licensed Product achieves an applicable milestone. Milestones are separately due for: [***] [***]

[***]

	Payments (US Dollars)		
Regulatory Milestone Event	**U.S.**	**Europe**	**Japan**
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

5.3 **Sales Milestones**. Subject to the terms and conditions set forth in the Agreement, in the event that the Annual Net Sales made by or on behalf of a Selling Entity for all Licensed Products in a given calendar year first exceeds a threshold set forth in the table immediately below, Pyxis shall pay to LCB the following one-time, non-refundable, non-creditable milestone payments.

Annual Net Sales Milestone Threshold	**Payment (US Dollars)**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

In the event that in a given calendar year more than one (1) Annual Net Sales milestone threshold is achieved, Pyxis shall pay to LCB each separate Annual Net Sales milestone payment with respect to each Annual Net Sales milestone threshold that is achieved in such calendar year.

Pyxis shall notify LCB in writing upon the first achievement, in respect of a Licensed Product, by or on behalf of Pyxis or its Affiliate or Sublicensee, of each of the Milestones set forth in Section 5.2 (Development Milestones), Section 5.3 (Regulatory Milestones) and Section 5.4 (Sales Milestones) no later than [***] of Pyxis's knowledge of achievement thereof, and in any event, each of the Milestones set forth in Section 5.4 (Sales Milestones) no later than [***] after the end of the applicable calendar year in which such Milestone is achieved. No later than [***] of receipt of an appropriate invoice from LCB, Pyxis shall pay the applicable payment due upon achievement of the corresponding Milestone Event. Each Milestone Event shall be deemed to be achieved once for all Licensed Products and shall be payable only once.

5.4 **Royalty Payments**. Pyxis shall pay to LCB royalties in respect of Annual Net Sales of all Licensed Products sold by or on behalf of a Selling Entity until the end of the Royalty Term in each country or jurisdiction at the Royalty Rate set forth in the chart below and the terms of Section 5.6 (Royalty Reports).

Annual Net Sales Threshold	Royalty Rate
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

Concurrent with the Royalty Report pursuant to Section 5.6 (Royalty Reports), Pyxis shall pay to LCB royalties calculated pursuant to this Section 5.5 (Royalty Payments).

In the event that Pyxis enters into an agreement with a Third Party to obtain a license under a Patent Right or other Intellectual Property Right owned or controlled by such Third Party that is necessary to Exploit a Licensed Compound, then royalties due for the Net Sales of the Licensed Product shall be reduced by [***] of the amount of royalties paid to such Third Party in respect of such agreement.

On a country by country basis in the Pyxis Territory, if during the applicable Royalty Term for a Licensed Product if such Licensed Product is sold in a country and is not Covered by a Valid Claim of any Patent Claim in the LCB IP in such country at the time of such sale, then the royalties due for the Net Sales of such Licensed Product in such country shall be reduced by [***].

In no event, however, will royalties payable be reduced by more than [***] of the royalty provided in the table above.

5.5 **Royalty Reports**. Within [***] following the end of each Calendar Quarter after the First Commercial Sale of Licensed Product in the Pyxis Territory, Pyxis shall provide LCB with a report ("**Royalty Report**") containing the following information for the applicable Calendar Quarter: the amount of gross sales of the Licensed Product in the Pyxis Territory, an itemized calculation of Net Sales in the Pyxis Territory showing deductions provided for in the definition of "Net Sales," a calculation of the royalty payment due on such sales (on an aggregate and not on a sale-by-sale basis), an accounting of the number of units of the Licensed Product sold, the exchange rate for each country in which the Licensed Product was sold, the application of the reductions, if any, made in accordance with the royalty reduction provisions of Section 5.5 (Royalty Payments).

5.6 **Payments and Taxes**. All sums due under the Agreement:

(a) all payments made under the Agreement shall be paid in US Dollars;

(b) unless otherwise agreed by the Parties, shall be paid in US Dollars to the account notified to the other Party, and in the case of Net Sales received in a currency other than US Dollars, the royalty shall be calculated in the other currency and then converted into equivalent US Dollars at the buying rate of such other currency, as quoted by Bloomberg as at the close of business on the last Business Day of the reporting period with respect to which the payment is made; and

(c) shall be made without deduction of income tax or other taxes, charges, or duties of any kind whatsoever that may be imposed, except insofar as a Party is required by applicable laws to withhold tax from the payment to the other Party. If a Party is required by applicable laws to withhold tax from a payment to the other Party under the Agreement, then the Party who is making the payment shall: (i) deduct such tax from the payment made to the other Party; (ii) timely pay the withheld taxes to the proper taxing authority; and (iii) promptly send proof of payment to the other Party and certify the receipt of the payment by the taxing authority. Prior to the imposition of any withholding tax on a payment under the Agreement, the Party making the payment that is subject to the withholding shall inform the other Party of its obligation to withhold tax and the Parties shall co-operate and take all steps reasonably and lawfully available to them to avoid such withholding taxes and to obtain double taxation relief under any applicable income tax treaty or otherwise. The Party required by applicable laws to make any such withholding, shall provide the other Party with all such certificates or other documents to enable the Parties to obtain a refund of such withheld taxes and any appropriate relief from double taxation of the payment in question. Pyxis shall make any payments due under the Agreement to LCB either by itself, or through an Affiliate in the United States where the only withholding or other taxes deducted from the payments is from the United States to the Republic of Korea or another jurisdiction with no greater withholding or other taxes for payments from United States (without regard to other jurisdictions) made to Republic of Korea as of the Effective Date.

(d) **Audit**. Pyxis shall maintain complete and accurate records in sufficient detail to permit LCB to confirm the accuracy of the calculation of royalties, milestones, and other payments under the Agreement. Upon reasonable prior notice, but not more than once per Calendar Year, unless there has been a prior underpayment by more than [***] such records shall be available during regular business hours for a period of **[***]** from the end of the calendar year to which they pertain for examination at the expense of LCB by an independent certified public accountant selected by LCB and reasonably acceptable to Pyxis, for the sole purpose of verifying the accuracy of the financial reports and correctness of the payments furnished by Pyxis pursuant to the Agreement. Any amounts shown to be owed but unpaid shall be paid within [***]] from the accountant's report, plus interest, as set forth in Section 5.7(e) (Late Payment) from the original due date. Any amounts shown to have been overpaid shall be refunded within [***]] from the accountant's report. LCB shall bear the full cost of such audit unless such audit discloses an underpayment by Pyxis of more than [***] of the amount due, in which case Pyxis shall bear the cost of such audit. The audit rights in this Section 5.7(d) (Audit) shall survive the Term for [***]. Once a particular Calendar Year has been audited, that Calendar Year may not be audited again.

(e) **Late Payment**. All payments due to a Party hereunder shall be made in US Dollars by wire transfer of immediately available funds into an account designated by the receiving Party. If a Party does not receive payment of any sum due to it on or before the due date, such payment will bear interest from the due date until the date of payment at the per annum rate of the lesser of: (i) [***] over the then-current US prime lending rate (as reported in the Wall Street Journal); or (ii) the maximum rate permitted by applicable law.

6. Intellectual Property

6.1 Ownership of Arising IP.

(a) Except as set specifically set forth in Sections 6.1(d) and 6.1(e) ownership will follow inventorship for all Arising IP, with inventorship being determined in accordance with United States patent laws (regardless of where the applicable activities occurred). Arising IP invented solely by or on behalf of LCB or any of its Affiliates will be solely owned by LCB or any of its Affiliates ("**LCB Arising IP**"). Arising IP invented solely by or on behalf of Pyxis or any of its Affiliates will be solely owned by Pyxis or any of its Affiliates ("**Pyxis Arising IP**"). Arising IP invented jointly by LCB or any of its Affiliates and Pyxis or any of its Affiliates will be jointly owned by both Parties ("**Joint Arising IP**").

(b) Each Party will promptly disclose to the other Party any Arising IP developed, created, conceived, or reduced to practice by or on behalf of such Party or any of its Affiliates during the Term. Each Party will obligate any employees, Sublicensees, and Third Party contractors to assign all Arising IP to such Party so that each Party can comply with its obligations under this Section 6.1 (Ownership of Arising IP), and each Party will promptly obtain such assignment.

(c) Each Party will have an undivided one-half (1/2) interest in and to the Joint Arising IP. Each Party, for itself and on behalf of any of its Affiliates, licensees and Sublicensees, and employees, subcontractors, consultants and agents of any of the foregoing, hereby assigns (and to the extent such assignment can only be made in the future hereby agrees to assign), to the other Party a joint and undivided interest in and to all Joint Arising IP.

(d) For Antibody IP, any improvements, modifications or derivatives identified, developed, generated or conceived pursuant to the Agreement shall be owned by LCB. Pyxis shall disclose to LCB any Antibody IP arising hereunder promptly and in any event within [***], after becoming aware of such Intellectual Property. Pyxis hereby assigns, and agrees to assign, to LCB all right, title and interest in and to any Antibody IP identified, developed, generated or conceived by Pyxis pursuant to the Agreement.

(e) For LCB Background IP, any improvements or enhancements identified, developed, generated or conceived pursuant to the Agreement shall be owned by LCB. Pyxis shall disclose to LCB any LCB Background IP arising hereunder promptly and in any event within [***], after becoming aware of such Intellectual Property. Pyxis hereby assigns, and agrees to assign, to LCB all right, title and interest in and to any LCB Background IP identified, developed, generated or conceived by Pyxis pursuant to the Agreement.

6.2 **Filing and Prosecution of Product-Specific Patent Rights**. As promptly as reasonably practicable after the Effective Date and where possible LCB shall file, in consultation with Pyxis and in coordination with Pyxis's counsel (in each case in good faith), appropriate divisionals, continuations or other appropriate filings so as to create separate LCB Product-Specific Patent Rights. LCB shall provide Pyxis with drafts of such filings sufficiently in advance of submitting such filings or responses so as to allow for a reasonable opportunity for Pyxis to review and comment thereon in consultation with LCB, and LCB shall implement all reasonable comments it receives from Pyxis thereon.

6.3 **Prosecution, Enforcement, and Defense**. Subject to the foregoing, the prosecution, maintenance, enforcement, and defence of LCB Product-Specific Patent Rights in the Pyxis Territory shall be at the discretion, cost and responsibility of Pyxis, through the use of counsel selected by Pyxis reasonably acceptable to LCB. Pyxis shall keep LCB informed regarding the prosecution, maintenance, defense, and enforcement of the LCB Product-Specific Patent Rights, including by providing LCB with a copy of any material communications to and from any relevant authority regarding such LCB Product-Specific Patent Rights, through the Joint Patent Committee and by providing LCB drafts of any material submissions or responses to be made to such authorities sufficiently in advance of submitting such submissions or responses so as to allow for a reasonable opportunity for LCB to review and comment thereon in advance of the Joint Patent Committee meeting. The Parties shall consider in good faith the requests and suggestions with respect to such drafts in the Joint Patent Committee and with respect to strategies for filing and prosecuting such LCB Product-Specific Patent Rights. In the event that Pyxis decides not to file, prosecute, or maintain any such LCB Product-Specific Patent Rights during the Term, (a) Pyxis shall provide reasonable prior written notice to LCB of such intention in advance of a Joint Patent Committee meeting (which notice shall, in any event, be given no later than [***] prior to the next deadline for any action that may be taken with respect to such LCB Product-Specific Patent Rights in such territory or other jurisdiction), and (ii) LCB shall thereupon have the option, in its sole discretion, to assume the control and direction of the filing, prosecution, and maintenance of such LCB Product-Specific Patent Rights at its sole cost and expense in such country or other jurisdiction.

6.4 **Product Marks**. Each Party will have the right to Commercialize the Licensed Product in its respective territory using trademarks, logos, and trade names that it determines appropriate, which may vary by region or within a region ("**Product Marks**"). Each Party will solely own all rights, title, and interests in and to any Product Marks adopted for use with the Licensed Product in its respective territory, including all goodwill related thereto, and will be responsible for the registration, filing, maintenance and enforcement of such Product Marks in its respective territory.

6.5 **Joint Patent Committee.**

(a) Pyxis and LCB agree to establish and convene a joint patent committee (the "**Joint Patent Committee**") to coordinate protection of each Party's respective intellectual property rights and obligations under the Agreement. Within [***] after the Effective Date or at least prior to any action that needs to be taken with respect to any intellectual property under the Agreement, each Party shall designate one (1) representative

for the Joint Patent Committee with the appropriate level of experience in the subject area and sufficient seniority to have the necessary decision-making authority in order for the Joint Patent Committee to fulfill its responsibilities. Either Party may designate substitutes for its Joint Patent Committee representative if such Party's designated representative is unable to be present at a meeting. From time to time, each Party may replace its Joint Patent Committee representatives by written notice to the other Party specifying the prior representative(s) and their replacement(s). The Parties shall use good faith efforts to achieve consensus regarding any actions. If the Joint Patent Committee fails to reach agreement on any such matter, it shall be referred to the JSC. The Joint Patent Committee responsibilities are as follows:

(i) Each Party shall disclose any intellectual property arising under the Agreement, including improvements to LCB Background IP, to the other Party promptly and in any event within [***], after becoming aware of such intellectual property.

(ii) The Parties agree to cooperate fully in the filing, prosecution, and maintenance of any LCB Product-Specific Patent Rights and LCB Arising IP and Joint Arising IP Patent Rights under the Agreement and to coordinate any transfer of information therefore.

(iii) The Parties shall agree which Patent Rights in the LCB Arising IP or Joint Arising IP or LCB Product-Specific IP shall be listed in the Purple Book or the Lists of Licensed Biological Products with Reference Product Exclusivity and Biosimilarity or Interchangeability Evaluations for any Licensed Product.

6.6 **Further Assurances**. If requested by either Party, the other Party shall execute without delay such formal licenses, assignments, or powers of attorney as may be necessary or appropriate for registration with patent offices and other relevant authorities of the rights granted under the Agreement. In the event of any conflict in meaning between any such license, assignment or power of attorney and the provisions of the Agreement, the provisions of the Agreement shall prevail wherever possible.

7. Confidential Information and Disclosure

7.1 **Confidentiality Obligations**. Except as provided in this Article 7 (Confidential Information and Disclosure), each Receiving Party shall:

(a) keep the Confidential Information of the Disclosing Party secret and confidential at all times;

(b) not disclose or permit the disclosure of any Confidential Information of the Disclosing Party, in whole, in part, or in summary, to any person, except as expressly permitted by the Agreement;

(c) take reasonable steps necessary to prevent the unauthorized disclosure or use of any of the Confidential Information of the Disclosing Party;

(d) not use the Confidential Information of the Disclosing Party or permit it to be used, in whole or in part, for any purpose other than performance of the obligations and enjoyment of the rights granted under the Agreement; and

(e) inform the Disclosing Party immediately if it becomes aware of the possession, use or knowledge of any of the Confidential Information of the Disclosing Party by a Third Party, and to provide any assistance in relation to such unauthorised possession, use or knowledge that the Disclosing Party may reasonably require.

7.2 **Exceptions**. Information of a Disclosing Party will not be considered Confidential Information to the extent that the Receiving Party can prove by means of reasonable written evidence:

(a) was known to the Receiving Party prior to disclosure by the Disclosing Party and at its free disposal;

(b) is or becomes publicly known other than as a result of breach of the Agreement by the Receiving Party or by anyone to whom the Receiving Party disclosed the Confidential Information of the Disclosing Party;

(c) is received by the Receiving Party from a Third Party lawfully entitled to make the disclosure without restrictions on the Receiving Party's rights to disclose or use; or

(d) is developed by any of the Receiving Party's Representatives without use of or knowledge of, the Confidential Information of the Disclosing Party;

except that the above exceptions do not extend to circumstances where the Confidential Information is specific, does not fall within the above exceptions, and is embraced by more general information which does fall within the above exceptions.

7.3 **Disclosure Required by Law**. The Receiving Party will not be in breach of its obligations under the Agreement to the extent that it is required to disclose Confidential Information of the Disclosing Party by law (*provided*, in the case of a disclosure under any freedom of information legislation, that the exemptions under that legislation do not apply) or order of a court or other public body or Competent Authority that has jurisdiction over it (including applicable national securities exchange regulations or listing requirements), *provided* that, to the extent reasonably possible before making such a disclosure, the Receiving Party shall, to the extent it is legally permitted to do so:

(a) inform the Disclosing Party of the proposed disclosure as soon as possible, and if possible before the court or other public body orders the disclosure;

(b) take into account reasonable requests of the Disclosing Party in relation to such disclosure;

(c) ask (or permit the Disclosing Party to ask as appropriate) the court or other public body to treat such Confidential Information as confidential; and

(d) permit the Disclosing Party to make representations to the court or other public body in respect of the disclosure or confidential treatment of such Confidential Information.

7.4 **Permitted Disclosure**. Notwithstanding the obligations set forth in Section 7.1 (Confidentiality Obligations) and subject to Section 7.10, a Receiving Party may disclose the Disclosing Party's Confidential Information (including the Agreement and the terms herein) to the extent such disclosure is reasonably necessary in the following situations:

(a) (i) for the filing and prosecution of any Patent Rights, as decided by the Joint Patent Committee in accordance with the Agreement; or (ii) for regulatory submissions and other filings with Competent Authorities, as necessary for the Exploitation of the Licensed Compound or Licensed Product as contemplated by the Agreement; and

(b) disclosure of the Confidential Information of the Disclosing Party to (i) those of its Representatives who reasonably require such access in connection with the performance of the obligations and enjoyment of the rights granted under the Agreement, and (ii) to actual or potential (sub)licensees, acquirers or assignees, collaborators, investment bankers, investors, or lenders (including in connection with any royalty factoring transaction), in both cases (i) and (ii), (A) have been informed of the confidential nature of such Confidential Information, the Disclosing Party's interest in such Confidential Information, and the provisions of the Agreement, and have been instructed to comply with the applicable provision of Article 7 of the Agreement; and (B) are bound by legally binding confidentiality obligations to the Receiving Party on terms that are no less onerous than those set out in the Agreement, and which extend to such Confidential Information. The Receiving Party shall ensure that all those Representatives or other recipients who have access to the Confidential Information of the Disclosing Party comply with the provisions of the Agreement, and the Receiving Party shall be liable to the Disclosing Party for any acts or omissions of any such Representative or other recipients, that would, if effected by the Receiving Party, constitute a breach of the Agreement.

7.5 **Public Announcement**. Except as set forth in Section 7.9 (Press Release), neither Party shall make, nor permit any person to make, any public announcement, whether oral or written, concerning the Agreement that is not previously disclosed or otherwise in the public domain, or make any use of the name, symbol, trade mark, trade name or logo of the other Party or its Affiliates without the prior written consent of the other Party (such consent not to be unreasonably withheld or delayed).

7.6 **Publications**. Each Party shall ensure that any and all intended publications or presentations in respect of Licensed Compound and Licensed Product to be made public, shall not disclose the other Party's Confidential Information, shall be subject to the approval of the Joint Patent Committee and shall be disclosed to the other Party for review at least [***]] prior to any submission or other public disclosure of such publication or presentation. If the other Party determines that the publication contains patentable subject matter, the publishing Party agrees to postpone publication or presentation of such Presentation for an additional [***] to permit the filing of a patent application.

7.7 **Disclosure of Results**. Subject to Section 7.6 (Publications), each Party may publish or promote any Results of that Party (but for clarity, not of Results obtained by the other Party). Each Party may publish or promote any Results of the other Party if permitted under Section 7.4, or with the prior consent of the other Party (not to be unreasonably withheld, conditioned or delayed), in each case after providing the other Party with as much notice as is reasonably practicable. The Party intending to disclose any Results shared by the other Party shall disclose such intended publication to the other Party shall postpone any portion of the publication for an additional period of up to [***], to permit the filing of a patent application and shall reasonably take into account any comments and recommendations of such other Party prior to publication.

7.8 **Use of Name**. Neither Party shall use the name of the other Party in any public disclosure, publicity or advertising involving the existence of the Agreement or its subject matter without the prior written approval of the other Party, unless otherwise permitted under this Article 7 (Confidential Information and Disclosure).

7.9 **Joint Press Release**. The Parties have agreed on a joint press release announcing the Agreement to be issued by the Parties on the Effective Date or such date and time as may be agreed by the Parties. No other disclosure of the existence or the terms of the Agreement may be made by either Party or its Affiliates except as provided in Section 7.3 (Disclosure Required by Law), Section 7.4 (Permitted Disclosures), Section 7.5 (Public Announcement) or Section 7.7 (Disclosure of Results).

7.10 **Non-Disclosure of Financial Terms**. Notwithstanding the foregoing in Sections 7.1 (Confidentiality Obligations) through 7.9 (Press Release), the Parties shall not ever disclose under any circumstances the financial terms, except those financial terms set out in Article 5 (Payments) of the Agreement as permitted under Section 7.3 (Disclosure Required by Law) or this Section 7.10 (Non-Disclosure of Financial Terms), without the prior written consent of the other Party (such consent not to be unreasonably withheld, conditioned or delayed in the case of disclosures under Section 7.4) except for the total upfront payment and total aggregate sum of the payments and any revenue-sharing ratio. Notwithstanding the foregoing, Pyxis may disclose the financial terms set out in Article 5 (Payments) without LCB's consent to *bona fide* actual or potential bankers, investors, or lenders interested in investing in Pyxis's Series B Financing, each of which has entered into confidentiality agreements at least as restrictive and protective of LCB as set forth in this Agreement.

7.11 **Subsequent Disclosures**. Once information under the Agreement has been disclosed in accordance with this Article 7, subsequent disclosures of the same or similar information shall not require the notification or consent of the other Party.

8. Representations and Warranties

8.1 **Mutual Representations and Warranties**. Pyxis and LCB each represents and warrants to the other, as of the Effective Date, as follows:

(a) **Organization**. It is duly organized, validly existing, and in good standing under the laws of the jurisdiction of its organization, and has all requisite power and authority, corporate or otherwise, to execute, deliver, and perform the Agreement.

(b) **Authorization**. The execution and delivery of the Agreement and the performance by it of the transactions contemplated hereby have been duly authorized by all necessary corporate action, and do not violate (i) in any material respect, any agreement to which such Party is bound, (ii) any requirement of any applicable law, or (iii) any order, writ, judgment, injunction, decree, determination, or award of any court or governmental agency presently in effect applicable to such Party.

(c) **Binding Agreement**. The Agreement is a legal, valid, and binding obligation of such Party enforceable against it in accordance with its terms and conditions, subject to the effects of bankruptcy, insolvency, or other laws of general application affecting the enforcement of creditor rights, judicial principles affecting the availability of specific performance, and general principles of equity (whether enforceability is considered a proceeding at law or equity).

(d) **No Conflicts**. It is not under any obligation, contractual or otherwise, to any person that conflicts with the terms of the Agreement.

(e) **Necessary Rights**. Each Party has all the necessary rights, title and interest to grant the licenses hereunder.

(f) **No Debarment**. Neither Party nor any of its Affiliates (i) has ever been debarred or subject to debarment or has received notice from the FDA of an intent to debar or has been convicted of a crime for which an entity or person could be debarred under 21 U.S.C. §335a; (ii) has ever been under indictment for a crime for which a person or entity could be debarred under 21 U.S.C. §335a; or (iii) or any of its personnel has been disqualified or is subject of a notice to disqualify as an investigator.

8.2 **Additional Representations and Warranties**. LCB further represents and warrants to Pyxis, as of the Effective Date, as follows:

(a) **No Claims**. There are no claims, judgments or settlements against LCB pending, or to LCB's Knowledge, threatened that invalidate or seek to invalidate the LCB Patent Rights or Patent Rights in the Antibody IP. To LCB's Knowledge, use of the LCB Know-How and LCB Patent Rights and Patent Rights in the Antibody IP by Pyxis in accordance with the terms of the Agreement, including Pyxis's further research, Development, Manufacturing or Commercialization or other Exploitation of Licensed Products does not infringe on, misappropriate or violate the rights of any Third Party, including any Third Party Intellectual Property Rights.

(b) **No Assignment**. Except as set forth in Schedule 1(bbb) LCB has not granted any right, license or interest in or to the LCB IP and Antibody IP that is inconsistent with the licenses and rights granted to Pyxis under the Agreement.

(c) **Ownership**. Except as set forth in Schedule 1(bbb) LCB is the sole and exclusive owner or otherwise controls the LCB IP, and, in each case, has the ability to grant to Pyxis the licenses and rights granted to Pyxis under the Agreement, and such ownership is free and clear of all encumbrances, security interests, options and licenses. None of the LCB IP is subject to any existing royalty or other payment obligations to any Third Party under any agreement or understanding entered into by LCB or its Affiliates, and to LCB's Knowledge of any obligation to pay any royalties or other amounts to any Third Party by reason of Pyxis's use thereof as contemplated by the Agreement.

(d) **Completeness**. To LCB's Knowledge, the Intellectual Property Rights licensed to Pyxis hereunder represents all of the Intellectual Property Rights that are being used by LCB or its Affiliates, or that are necessary or useful, for the research, Development, Manufacture and Commercialization or other Exploitation of the Licensed Compound or Licensed Products.

(e) **No Litigation**. There is no claim, action, suit, proceeding, complaint or investigation pending before any court or administrative office or agency or, to LCB's Knowledge, currently threatened against LCB or any of its Affiliates, with respect to any of the LCB IP.

(f) **No Third Party Infringement**. LCB has not initiated or been involved in any proceedings or claims in which it alleges that any Third Party is or was infringing or misappropriating any LCB IP nor have any such proceedings been threatened by LCB. To LCB's Knowledge, no Person is infringing or threatening to infringe or misappropriating or threatening to misappropriate any of the LCB IP.

(g) **Assignment by Employees, Agents and Consultants**. All employees and agents of, and consultants to, LCB are obligated to assign to LCB their rights in and to any inventions arising out of their work at LCB either pursuant to written agreement or by operation of law.

(h) **Public or Philanthropic Funding**. None of the LCB IP were supported in whole or in part by funding or grants by any governmental agency or philanthropic or charitable organization in any manner that would impose an obligation on Pyxis, its Affiliates or any Sublicensee hereunder.

(i) **Disclosure**. LCB has made available to Pyxis all material toxicology studies, clinical data, process and analytical development information, manufacturing process data, material filings and material correspondence with Regulatory authorities, and all other material information in its possession or control relating to the Licensed Compound and, to LCB's Knowledge, all written information are true and correct copies.

(j) **Confidentiality**. LCB has used Commercially Reasonable Efforts to protect the confidentiality of those parts of the LCB IP that constitute confidential or proprietary information of LCB.

8.3 **LCB Covenant**. From and after the Effective Date, LCB shall not amend, modify, terminate, or waive compliance with any material provision of, the license with Y-Biologics Inc. to LCB for use of the monoclonal anti-DLK1 antibody within LCB67 in a manner that would adversely affect Pyxis's rights under this Agreement, except with Pyxis's prior consent (not to be unreasonably withheld, delayed or conditioned).

8.4 **Debarment**. If, during the Term, a Party has reason to believe that it or any of its employees, officers, independent contractors, consultants or agents rendering services relating to the Licensed Compound and Licensed Product: (i) is or will be debarred or convicted of a crime for which a person could be debarred under 21 U.S.C. §335a; or (ii) is or will be under indictment for a crime for which a person could be debarred under 21 U.S.C. §335a, then such Party shall immediately notify the other Party of same in writing; or (iii) has committed a wrongful act for which FDA would have grounds for invoking the Application Integrity Policy (AIP).

9. Liability

9.1 **No Limitation on Certain Liabilities**. Nothing in the Agreement shall exclude or limit, or purport to exclude or limit, a Party's liability in the case of:

(a) breach of Article 2 (License), Section 4.9 (Exclusivity), Article 6 (Intellectual Property) or Article 7 (Confidential Information and Disclosure);

(b) fraud or fraudulent misrepresentation;

(c) death or personal injury resulting from its gross negligence; or

(d) any other matter in respect of which it would be unlawful to exclude or restrict liability.

9.2 **Limitation of Liabilities**. Subject to Section 9.1 (No Limitation on Certain Liabilities), neither Party nor any of its Affiliates shall be liable in contract, tort, negligence, breach of statutory duty or otherwise to the other Party for any consequential, incidental, special, punitive, exemplary or indirect loss or damage, loss of profits, loss of business or loss of goodwill arising out of the Agreement, except to the extent any such losses or damages are required to be paid as part of a Claim for which either Party provides indemnification under Section 9.3 (Indemnification). EXCEPT AS SPECIFICALLY SET FORTH IN ARTICLE 8 (REPRESENTATIONS AND WARRANTIES) NEITHER PARTY MAKES ANY REPRESENTATIONS OR GRANTS ANY WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE OR ANY WARRANTY AS TO THE VALIDITY OF ANY PATENT OR THE NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

9.3 **Indemnification**.

(a) Pyxis shall indemnify, defend, and hold harmless LCB and its Affiliates and their respective officers, directors, employees and agents (the "**LCB Indemnitees**"), from and against any and all losses, liability, damages, costs, infringement, or expenses of any kind or nature (including reasonable attorneys' fees, expert witness fees, and court costs) arising with respect to any claims, suits, demands, judgments or causes of action (collectively, "**Claims**") brought against a LCB Indemnitee by a Third Party arising out of or relating to (i) the Exploitation of any Licensed Compound and Licensed Product by Pyxis or its Affiliates or its or their Sublicensees or subcontractors in the Field in the Pyxis Territory, (ii) a breach of any of Pyxis's representations, warranties, or obligations under the Agreement, (iii) the wilful misconduct or gross negligence of Pyxis or any of its Affiliates, or (iv) violation of applicable law by Pyxis or any of its Affiliates, in each case, save to the extent that such Claim is finally determined to arise from the wilful misconduct or gross negligence of LCB.

(b) LCB shall indemnify, defend, and hold harmless Pyxis and its Affiliates and their respective officers, directors, employees and agents (the "**Pyxis Indemnitees**"), from and against Claims brought against a Pyxis Indemnitee by a Third Party arising out of or relating to (i) the Exploitation of any Licensed Compound and Licensed Product by LCB or its Affiliates or its or their sublicensees or subcontractors in the LCB Territory, (ii) a breach of any of LCB's representations, warranties, or obligations under the Agreement, (iii) the wilful misconduct or gross negligence of LCB or any of its Affiliates, or (iv) violation of applicable law by LCB or any of its Affiliates, in each case, save to the extent that such Claim is finally determined to arise from the wilful misconduct or gross negligence of LCB.

(c) For the purposes of the Agreement, the term "**Indemnitee**" shall refer to an LCB Indemnitee or a Pyxis Indemnitee, as applicable. The indemnifying party under the Agreement shall be referred to as, the "**Indemnifying Party**".

9.4 **Indemnification Procedure**. Where an Indemnitee seeks indemnification pursuant to Section 9.3 (Indemnification), the Indemnitee shall provide prompt written notice to Pyxis of the assertion or commencement of any such Claim. The Indemnifying Party shall have the right to assume the defence of any such claim and shall not be liable for settlement of any claim effected without its written consent. The Indemnitee shall provide all assistance and information reasonably required by the Indemnifying Party, at such Indemnifying Party's sole expense. The Indemnitee shall:

(a) not make any admission of liability, conclude any agreement in relation to such liability or make any compromise with any person, body or authority in relation to such liability without the prior written consent of the Indemnifying Party; and

(b) have the right to participate in (but not control) the defence of a claim and to retain its own counsel in connection with such claim at its own expense.

9.5 **Insurance**. Pyxis shall obtain and maintain such types and amounts of insurance as is normal and customary for it to cover its activities under the Agreement, and will upon request by LCB, provide LCB with a certificate of insurance in that regard, along with any amendments and revisions thereto. Without prejudice to the foregoing:

(a) at least [***] before the start of any Commercialization of any Licensed Product, Pyxis shall obtain and maintain during the remainder of the Term (and for the longer of either 3 years after the expiry or termination of the Agreement or 3 years after the last Licensed Product is sold) of the Agreement product liability insurance on a "claims-made basis" in an amount no lower than $[***] per occurrence and $[***] in the aggregate on a worldwide basis, and shall provide to LCB evidence of the same;

(b) upon the screening of the first patient in any clinical trials of a Licensed Product in human subjects, Pyxis shall obtain and maintain clinical trials insurance on a "claims-made basis" in an amount no lower than $[***] per occurrence and $[***] in the aggregate on a worldwide basis, and shall provide to LCB evidence of the same; and

(c) all such policies or coverages shall name LCB as an additional insured. Pyxis will provide to LCB a certificate evidencing the insurance it is required to obtain and shall keep in force such policy upon LCB's reasonable request during the Term. Such certificate will evidence that LCB is an additional insured. Notice of cancellation or material change will be made in accordance with the policy provisions.

10. Term and Termination

10.1 **Term**. The Agreement shall come into effect on the Effective Date and shall continue on a country-by-country basis until the expiration of each Royalty Term in each country (unless earlier terminated in accordance with Section 10.2 (Termination) or by operation of law) ("**Term**"). Upon expiry of the Royalty Term in respect of a country and a Licensed Product, all licenses granted to Pyxis hereunder in respect of such Licensed Product and such country shall become perpetual, irrevocable, and fully paid in the Field.

10.2 **Termination**.

(a) **Termination for Material Breach**. Either Party may terminate the Agreement at any time by notice in writing to the other Party, such notice to take effect [***] from receipt of such notice if such other Party is in material breach of the Agreement (including failure to make any payment, which failure shall automatically be deemed a material breach, or Commercially Reasonable Efforts or breach of any provisions of Article 6 or 7), unless the breach is failure to make a payment, in which case the notice will take effect [***] from receipt. If such breach can be cured within such [***] period (or [***] period in the case of failure to make a payment), then such termination will not be effective if the breaching Party promptly commences actions to cure such breach and thereafter diligently continues such actions and cures such breach during such [***] period after such notice. If an allegedly breaching Party disputes the occurrence of the material breach, then the cure period set forth in this Section 10.2(a) (Termination for Material Breach) shall be tolled during the period that the alleged material breach is being disputed in accordance with Sections 11.1 (Disputes) and 11.2 (Arbitration) of the Agreement, until the dispute is finally resolved. From the after the date that the dispute has been finally resolved the cure period shall resume.

(b) **Termination for Technical Failure**. At any time during the Term, Pyxis may terminate the Agreement for Technical Failure, [***].

(c) **Termination for Insolvency or Cessation of Business**. To the extent permitted by applicable law, either Party may terminate the Agreement if:

(i) the other Party becomes insolvent, or is unable its debts as they mature;

(ii) an order is made, or a resolution is passed for the winding up of such other Party (other than voluntarily for the purpose of solvent amalgamation or reconstruction);

(iii) a liquidator, administrator, administrative receiver, receiver, or trustee is appointed in respect of the whole or any part of such other Party's assets or business; or

(iv) seeks relief or if proceedings are commenced against the other Party, or on its behalf, under any bankruptcy, insolvency or debtors' relief law and those proceedings have not been vacated or set aside within [***] after the commencement of those proceedings.

(d) **Termination for Patent Challenge**. In the event of a Patent Challenge by Pyxis or its Affiliates or Sublicensee, LCB may, in its sole discretion, as and to the extent permissible under applicable law, elect to terminate the Agreement in whole or in part with respect to the Patent Rights that are the subject of the Patent Challenge, upon [***] notice in writing to Pyxis, such termination to take effect immediately following such notice period; provided that if Pyxis or its Affiliate or Sublicensee withdraws (or causes to be withdrawn) such Patent Challenge within [***] after being requested to do so by LCB in writing (which termination notice will be deemed a request), then LCB will have no right to terminate the licenses under the Agreement with respect to such Patent Rights pursuant to this Section 10.2(d) (Termination for Patent Challenge). In addition, notwithstanding

the foregoing, LCB will have no right to terminate the relevant licenses under the relevant Patent Rights under the Agreement pursuant to this Section 10.2(d) (Termination for Patent Challenge) with respect to: (i) any affirmative defense or other validity, enforceability, or non-infringement challenge, whether in the same action or in any other agency or forum of competent jurisdiction, advanced by Pyxis, or any of its Affiliates or Sublicensees in response to any claim or action brought in the first instance by, or on behalf of, LCB, (ii) any Patent Challenge that is commenced by a Sublicensee, provided that Pyxis demands that such Sublicensee withdraw such Patent Challenge promptly after Pyxis becomes aware of such Patent Challenge and terminates the sublicense agreement with the applicable Sublicensee if such Sublicensee does not withdraw such Patent Challenge within [***]] after receipt of notice from Pyxis; or (iii) any Patent Challenge brought by a Third Party [***] or more prior to the initial written indication of interest that results in such Third Party becoming an Affiliate of Pyxis as a result of a Change of Control of Pyxis or such Third Party as long as Pyxis or such Third Party, its Affiliates and their sublicensees, as applicable, institute commercially reasonable safeguards or firewalls between the personnel and advisors assisting or working on such Patent Challenge and personnel and advisors assisting or working on any Licensed Product or ROFN Eligible Product so that personnel and advisors assisting or working on such Patent Challenge do not have access to or knowledge of, and may not use, LCB IP or Arising IP;

(e) **Termination for Convenience**. Pyxis may terminate the Agreement with respect to any country in the Pyxis Territory upon ninety (90) Days prior written notice to LCB.

(f) **Breach of Opt-In Agreement.** Without limiting either Party's right to terminate pursuant to Section 10.2(a) a Party may terminate the Agreement in whole or in part if the other Party materially breaches the Opt-In Agreement including by LCB for Pyxis's failure either to issue LCB the Initial Shares (as defined in the Opt-In Agreement) by the Financing Date or to pay to LCB the [***] required by Section 2.2(b) of the Opt-In Agreement. For the avoidance of doubt, termination of the Opt-In Agreement by LCB shall not terminate Pyxis' obligation to share Sublicense Revenue with LCB if LCB elects not to terminate the Agreement.

10.3 **Rights in Bankruptcy**.

(a) The Parties agree that the Agreement constitutes an executory contract under Section 365 of Chapter 11 the United States Code as amended (the "**Code**") for the license of "intellectual property" as defined under Section 101 of the Code and constitutes a license of "intellectual property" for purposes of any similar applicable laws in any other country in the Territory. The Parties further agree that Pyxis, as licensee of such rights under the Agreement, shall retain and may fully exercise all of its protections, rights, and elections under the Code, including under Section 365(n) of the Code, and any similar applicable laws in any other country in the Territory.

(b) All rights, powers, and remedies of Pyxis provided for in this Section 10 are in addition to and not in substitution for any and all other rights, powers, and remedies now or hereafter existing at law or in equity (including under the Code and any similar applicable laws in any other

country in the Territory). The Parties agree that they intend the following Pyxis rights to extend to the maximum extent permitted by law, including, for purposes of the Code in the event of a bankruptcy case of LCB under the Code or any similar insolvency proceeding under any similar applicable laws, in each case subject to Pyxis's election to retain its rights as a licensee under Section 365(n) of the Code (or such similar applicable laws) and the Agreement, including continuing payments as provided thereby or hereunder: (i) the right of a complete duplicate or access to, as appropriate, any LCB Product-Specific IP (including all embodiments thereof), or, if any such LCB Product-Specific IP (or embodiments thereof) are not already in LCB's possession, any Third Party with whom LCB contracts to perform an obligation of LCB under the Agreement which is necessary for the Exploitation of the Licensed Compounds or Licensed Products in the Field in the Territory; (ii) the right to contract directly with any Third Party described in paragraph (i) to complete the contracted work; and (iii) the right to cure any breach of LCB under any such agreement with a Third Party if LCB becomes incapable of curing, or refuses in writing to cure any such breach and the right to set off or recoup the costs thereof against amounts payable to LCB under the Agreement. The Parties agree that this Section 10.3 (Rights in Bankruptcy) shall apply to LCB as if LCB were the licensee and Pyxis were the licensor *mutatis mutandis*, in the event of the bankruptcy of Pyxis and LCB and Pyxis are party to a license set forth in Section 10.4(d).

10.4 **Effect of Termination**. Upon termination of the Agreement by either Party under Section 10.2 (Termination), then with respect to the countries or regions for this which the Agreement is terminated:

(a) **Termination of License**. Pyxis and its Affiliates shall immediately cease to exercise the rights under the LCB IP, except that Pyxis and its Affiliates shall be entitled to sell, use, or otherwise dispose of (subject to payment of royalties due) any unsold or unused stocks of the Licensed Products during a period of [***]] after the effective date of the termination of the Agreement.

(b) **Termination of the Opt-In Agreement.** At the effective date of termination of the Agreement the Opt-In Agreement shall terminate.

(c) **Sublicenses**. All Sublicenses of the LCB IP shall survive any termination of the Agreement provided the applicable Sublicensee is not then in material breach of its Sublicense, and such Sublicense shall become a direct license to such Sublicensee, and in such direct license, the scope of the license grant shall be the same as the scope of such Sublicensee's Sublicense grant under the applicable Sublicense.

(d) **Assignment of Results and License under Pyxis IP**. Pyxis shall, at LCB's request, [***]transfer and assign to LCB the following items with respect to Licensed Compounds and Licensed Products, to the extent reasonably necessary or reasonably useful for the Exploitation of the Licensed Compounds and Licensed Products in the region or Territory: all clinical and regulatory correspondence; all Regulatory Approvals held by Pyxis or its Affiliates; all Results, including the trial master file, the clinical database and the safety database; and marketing reports, reimbursement studies and promotional materials specifically related to the Licensed Compound or Licensed Product (collectively, the "**Pyxis-Developed Materials**").

Upon termination, Pyxis shall, at LCB's request, grant to LCB an exclusive, royalty-bearing (in the case of termination under Section 10.2(a) or 10.2(e)), and worldwide license (with the right to sublicense in multiple tiers) to the Pyxis IP solely for purposes of the Exploitation of the Licensed Compound and Licensed Products as they exist as of the effective date of termination, as applicable (the "**Pyxis Exclusive License Grant**"). The Parties will agree in good faith regarding a technology transfer plan with respect to the Pyxis-Developed Materials to facilitate LCB's practice of the foregoing license at LCB's cost (to the extent in addition to what is required under Section 4.10) which shall be at an agreed reasonable Pyxis FTE rate thereafter. In consideration for the Pyxis Exclusive License Grant and the transfer and assignment of Pyxis-Developed Materials, LCB shall pay Pyxis the following royalty rate with respect to Net Sales of the returned Licensed Product by LCB, its Affiliates or Sublicensees depending upon the stage of Development of Licensed Product at the time of termination for a period beginning on the date of the license grant and continuing until the expiration of the last patent claim covering composition of matter covering the Licensed Compound included in the Pyxis Non-Exclusive License Grant.

Development stage of the Licensed Product at termination	Royalty rate to Pyxis
[***]	[***]
[***]	[***]
[***]	[***]

(e) **Transfer of Inventory**. Upon LCB's request, LCB may procure any unsold or unused stocks of the Licensed Products from Pyxis. Such stocks shall be provided at a transfer price that equals [***]

10.5 Effect of Expiration or Termination by either Party.

(a) **Accrued Rights**. Expiry or termination of the Agreement will not affect any accrued rights or liabilities that either Party may have by the time termination takes effect, including the Second Payment and under the Opt-In Agreement, the right as of the Effective Date to equity in the next Pyxis Financing (as defined in the Opt-In Agreement) and any accrued obligations to share the full amount of Sublicense Revenue, the obligation to pay Milestone Payments in respect of milestones which have been achieved before the effective date of termination and the obligation to pay royalties in relation to Net Sales in respect of Licensed Products sold or supplied prior to the effective date of termination, *[***]*

(b) **Return of Confidential Information**. Upon any expiration or termination of the Agreement pursuant to Section 10.2, the Receiving Party shall return to the Disclosing Party any documents or other materials that contain the Disclosing Party's Confidential Information in relation to the countries and regions with respect to which the Agreement has been terminated, including all copies made, and make no further use or disclosure thereof. The Receiving Party may, however, keep copies of the Confidential Information of the Disclosing Party in its legal adviser's files solely for the purpose of enabling it to comply with the provisions of the Agreement.

10.6 **Termination Not Sole Remedy**. A Party's right of termination under the Agreement, and the exercise of any such right, shall be without prejudice to any other right or remedy (including any right to claim damages) that such Party may have in the event of a breach of contract or other default by the other Party.

10.7 **Survival**. Upon termination (but not expiration) of the Agreement for any reason, the provisions of Article 1 (Definitions and Interpretation), Section 2.3 (Restrictions), Sections 3.1(b) and 3.1(d) (Sublicenses), Article 5 (Payments) (solely with respect to the amounts accrued prior to termination but not paid and the reporting tax, auditing and information sharing procedures associated therewith), Sections 6.1 (Ownership) and 6.6 (Further Assurances), Section 7 (Confidential Information and Disclosure other than Sections 7.6 (Publications) and 7.7 (Disclosure of Results) which shall not be applicable to LCB), Article 9 (Liability), Section 10.4 (Effect of Termination), Section 10.5 (Effect of Expiration or Termination by either Party), Section 10.6 (Termination Not Sole Remedy), this Section 10.7 (Survival), Article 11 (Dispute Resolution), and Article 12 (General) shall remain in force.

11. Dispute Resolution and Governing Law

11.1 **Disputes**. Any dispute between the Parties arising out of or relating to the Agreement, including any non-contractual disputes or claims or any question regarding its existence, validity, or termination, shall be resolved by binding arbitration. The proceedings shall be initiated by the service of a written notice of dispute by a Party on the other Party setting out details of the dispute and the reasons why the Party serving the notice believes that the dispute has arisen. Upon service of such a notice, the dispute shall be referred to the Senior Officers (or their respective delegates), who shall endeavour to resolve the dispute amicably (each acting reasonably and in good faith).

11.2 **Arbitration**. In the event that a dispute cannot be resolved to the satisfaction of both Parties within [***] of referral to the Senior Officers (or their respective delegates), or if a Party either fails to participate or to continue to participate in the process referred to in Section 11.1 (Disputes), it shall be finally settled through an arbitration in accordance with the Rules of Arbitration of the International Chamber of Commerce 2021 in accordance with the Expedited Procedure Rules irrespective of the amount in dispute. The right and obligation to arbitrate under this Section 11.2 (Arbitration) shall extend to any claims by or against the Parties and their respective Affiliates and any agents, principals, officers, directors, or employees of either of the Parties or their respective Affiliates. The arbitration tribunal shall be composed of one arbitrator agreed by the Parties. If the Parties are unable to agree on an arbitrator within [***] after the transmission of the request for arbitration by one of the Parties, then the arbitration tribunal shall be composed of one arbitrator selected by each Party and one arbitrator selected by the first two arbitrators. The arbitral award shall be final and binding. A judgment on any award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. The legal seat of arbitration shall be Boston, Massachusetts, and the language of the arbitral proceedings shall be English. Either party may apply to the arbitrator(s) seeking injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. The arbitrators shall have the authority to grant specific performance, issue summary judgments or grant other depository motions and, if either Party engages attorneys to enforce any rights arising out of or relating to the Agreement, then the prevailing Party shall be entitled to recover its reasonable fees and costs expended in engaging such attorneys. The Parties agree that all information, including the result, of such arbitration and the fact that arbitration takes place shall be regarded as Confidential Information of both Parties and shall not be disclosed without the written consent of the other Party.

11.3 **Governing Law**. The Agreement (and any dispute or claim relating to it, its subject matter, its enforceability or its termination, including non-contractual claims) is governed by and construed in accordance with the substantive laws of Massachusetts without regard to its conflicts of law provisions.

11.4 **Other Remedies**. Nothing in the Agreement shall prevent either Party or their Affiliates from seeking interim relief or a temporary restraining order or injunction concerning a dispute either prior to or during any proceeding if necessary to protect the interests of such Party or to preserve the status quo pending the proceeding, including any such remedy against the Receiving Party from any court of competent jurisdiction in the event of a threatened or actual breach of any confidentiality obligation hereunder, or to prevent wrongful use of any Confidential Information hereunder without posting of a bond or other security.

12. General

12.1 **No other license**. Nothing in the Agreement shall be construed as giving to either Party any rights to use any Intellectual Property Rights other than as expressly granted by the Agreement.

12.2 **Amendment**. The Agreement may only be amended in writing signed by duly authorized representatives of Pyxis and LCB.

12.3 **Assignment**.

(a) Subject to Section 12.3(b), neither Party may assign, mortgage, charge, or otherwise transfer any rights or obligations under the Agreement without the prior written consent of the other Party.

(b) With written notice to the other Party before such assignment or transfer, either Party may assign and transfer all its rights and obligations under the Agreement to (i) an Affiliate, or (ii) any counter-party to a Change of Control transaction, *provided* that the assignee undertakes in writing to the other Party to be bound by and perform the obligations of the assignor under the Agreement. Any assignment or attempted assignment by either Party in violation of the terms of this Section 12.3 (Assignment) will be null, void and of no legal effect.

12.4 **Waiver**. No failure or delay on the part of either Party to exercise any right or remedy under the Agreement shall be construed or operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude the further exercise of such right or remedy.

12.5 **Invalid Clauses**. If any provision or part of the Agreement is held to be invalid, amendments to the Agreement may be made by the addition or deletion of wording as appropriate to remove the invalid part or provision but otherwise retain the provision and the other provisions of the Agreement to the maximum extent permissible under applicable law such that the objectives contemplated by the Parties when entering into the Agreement may be realized.

12.6 **No agency**. Neither Party shall act or describe itself as the agent of the other, nor shall it make or represent that it has authority to make any commitments on the other's behalf. Each Party will act solely as an independent contractor, and nothing in the Agreement will be construed to give either Party the power or authority to act for, bind, or commit the other Party in any way. Nothing herein will be construed to create the relationship of partners, principal and agent, or joint-venture partners between the Parties.

12.7 **Performance by Affiliates**. Each Party may perform any obligations and exercise any right hereunder through any of its Affiliates, *provided* that such Party will remain primarily responsible for the other Party hereunder. Each Party hereby guarantees the performance by any of its Affiliates of such Party's obligations under the Agreement, and will cause its Affiliates to comply with the provisions of the Agreement in connection with such performance. Any breach by a Party's Affiliate of any of such Party's obligations under the Agreement will be deemed a breach by such Party, and the other Party may proceed directly against such Party without any obligation to first proceed against such Party's Affiliate.

12.8 **Force Majeure**. Neither Party will be held liable to the other Party nor be deemed to have defaulted under or breached the Agreement for failure or delay in achieving any objective, satisfying any condition, or performing any obligation under the Agreement to the extent that such failure or delay is caused by or results from acts or events beyond the reasonable control of such Party, including acts of God, embargoes, war, acts of war (whether war be declared or not), terrorism, insurrections, riots, civil commotions, government actions, unavailability of supplies, materials or transportation, fire, earthquakes, floods, epidemics, pandemics, the spread of infectious diseases, and quarantines ("**Force Majeure**"). The affected Party will notify the other Party in writing of any Force Majeure circumstances as soon as reasonably practical, will provide a good faith estimate of the period for which its failure or delay in performance under the Agreement is expected to continue based on currently available information and shall use best efforts to mitigate the effects such Force Majeure and promptly resume performance upon the cessation thereof.

12.9 **Notices**. Any notice to be given under the Agreement must be in writing and be delivered to the other Party by hand or courier. Any notice shall be deemed to have been received on the Day of delivery. This Section 12.9 (Notices) is not intended to govern the day-to-day business communications necessary between the Parties in performing their obligations under the terms of the Agreement. Until changed by notice given in accordance with this clause, all notices should be addressed as follows:

For LCB:

Attention:

*** or Chief Business Development Officer

Address:

8-26 Munpyeongseo-ro Daedeok-gu
Daejeon, 34302, Republic of Korea

For Pyxis:

Attention:

Chief Executive Officer

Address:

Pyxis Oncology, Inc.
35 Cambridge Park Dr.
Cambridge, MA 02140

With copies, which shall not constitute notice to:

For LCB:	**For Pyxis:**
***	***
Foley Hoag Seaport West Boston, MA 02210-2600 ***	Hogan Lovells US LLP 100 International Drive, Suite 2000 Baltimore, MD 21202 ***

12.10 **Further Action**. Each Party agrees to execute, acknowledge and deliver such further instruments, and do all reasonable further similar acts, as may be necessary or appropriate to carry out the purposes and intent of the Agreement.

12.11 **Entire Agreement**. The Agreement and the Opt-In Agreement, including their Schedules, set out the entire agreement between the Parties relating to its subject matter and supersede all prior oral or written agreements, arrangements, or understandings between them relating to such subject matter.

12.12 **Third Parties**. The Agreement does not create any right enforceable by any person who is not a party to it except as otherwise expressly provided in Sections 9.3 (Indemnification) and 9.4 (Indemnification Procedure). Except as expressly provided in Sections 9.3 (Indemnification) and 9.4 (Indemnification Procedure), no person who is not a Party to the Agreement shall have the right to enforce any term of the Agreement.

12.13 **Counterparts; Electronic Signatures**. The Agreement may be executed in any number of counterparts, each of which is an original but all of which together will constitute one document. Each Party acknowledges and agrees that the Agreement and all schedules, related documents, amendments and modifications thereof, may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, “electronic signature” shall include faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

—Signature Page Follows—

The Agreement has been entered into on the Effective Date.

For and on behalf of	**For and on behalf of**
LegoChem Biosciences Inc.	**Pyxis Oncology, Inc.**
/s/ Yong-Zu Kim	/s/ Lara Sullivan, M.D.
Signed	Signed
Yong-Zu Kim	Lara Sullivan, M.D.
CEO & President	Chief Executive Officer

Exhibit 1
Opt-In, Investment and Additional Consideration Agreement

[***]

Exhibit 2

Indications
[***]

Schedule1(f):
Antibody IP: Patent Rights

[***]

Schedule 1(bbb):
LCB Background Patent Rights

[***]

Schedule (jjj):

LCB Product-Specific Patent Rights
[***]

Schedule 1(mmm):

Sequence ID of DLK1-Antibody (Licensed Compound)

[***]

Schedule 1(hhhh):
Patent Rights in Pyxis Background IP
[***]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

THIS FIRST AMENDMENT TO LICENSE AGREEMENT (this "**Amendment**") is entered into as of 25th February, 2021, effective as of the Effective Date. Capitalized terms used but not defined herein shall have the meanings assigned to such terms in the Agreement (as defined below).

BETWEEN:

(1) **Pyxis Oncology, Inc.**, a company organized and existing under the laws of Delaware, whose office is 35 CambridgePark Drive, Cambridge, MA 02140 ("**Pyxis**"); and

(2) **LEGOCHEM BIOSCIENCES INC.**, a corporation registered in the Republic of Korea, whose registered office is at 8-26 Munpyeongseo-ro Daedeok-gu Daejeon City, 34302, Republic of Korea ("**LCB**", with Pyxis, each a "**Party**").

RECITALS

(A) Pyxis and LCB are parties to that certain License Agreement (the "**Agreement**"), dated as of 1 December, 2020.

(B) Pursuant to Section 12.2 of the Agreement, the Parties wish to amend the Agreement to correct the inadvertent omission of certain Patent Rights from Schedule 1(bbb) of the Agreement.

(C) Pursuant to Section 12.9 of the Agreement, the Parties wish to update certain notice information.

NOW IT IS HEREBY AGREED as follows:

1. **Amendment of Schedule 1(bbb)**. Pursuant to Section 12.2 of the Agreement, Schedule 1(bbb) of the Agreement is hereby deleted and replaced with Schedule 1(bbb) attached hereto.

2. **Update of Notice Address**. Pursuant to Section 12.9 of the Agreement, the notice address for Pyxis shall be amended such that copies, which shall not constitute notice, shall be sent to the following address:

Asher M. Rubin
Sidley Austin LLP
2850 Quarry Lake Drive, Suite 301
Baltimore, MD 21209
arubin@sidley.com

3. **Effect of this Amendment**. Except as specifically amended as set forth herein, each term and condition of the Agreement shall continue in full force and effect, unless and until amended, restated, waived or terminated pursuant to the applicable terms thereof.

4. **Entire Agreement**. This Amendment, the Agreement and the Opt-In Agreement, including their Schedules, set out the entire agreement between the Parties relating to its subject matter and supersede all prior oral or written agreements, arrangements, or understandings between them relating to such subject matter.

5. **Governing Law**. This Amendment (and any dispute or claim relating to it, its subject matter, its enforceability or its termination, including non-contractual claims) is governed by and construed in accordance with the substantive laws of Massachusetts without regard to its conflicts of law provisions.

6. **Counterparts; Electronic Signatures**. This Amendment may be executed in any number of counterparts, each of which is an original but all of which together will constitute one document. Each Party acknowledges and agrees that this Amendment may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, "electronic signature" shall include faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

——-Signature Page Follows——-

This Amendment has been entered into on the date first written above.

For and on behalf of	**For and on behalf of**
LegoChem Biosciences Inc.	**Pyxis Oncology, Inc.**
/s/ Yong-Zu Kim	/s/ Lara Sullivan M.D.
Signed	Signed
Yong-Zu Kim	Lara Sullivan, M.D.
CEO & President	Chief Executive Officer

Schedule1(bbb):
LCB Background Patent Rights

[***]

Exhibit 10.12

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

Execution Copy

THIS OPT-IN, INVESTMENT AND ADDITIONAL CONSIDERATION AGREEMENT (the "**Opt-In Agreement**") is made on December 1, 2020 ("**Effective Date**") as part of the License between the Parties (each as defined below).

BETWEEN:

(1) **PYXIS ONCOLOGY, INC.**, a company incorporated in the state of Delaware, United States, whose office is at 35 CambridgePark Drive, Cambridge, MA 02140 ("**Pyxis**"); and

(2) **LEGOCHEM BIOSCIENCES INC.**, a corporation registered in the Republic of Korea whose registered office is at 8-26 Munpyeongseo-ro Daedeok-gu Daejeon City, 34302 Korea, Republic of (South) (**"LCB"**, together with Pyxis, the "**Parties**").

RECITALS

(A) LCB is a biopharmaceutical company based in The Republic of Korea focusing on the development of linkers, toxins, and conjugation technologies useful in the manufacture and development of antibody-drug conjugates.

(B) Pyxis is a United States based biopharmaceutical company focused on the development of, among other pharmaceutical and biological products, antibody-drug conjugates.

(C) LCB has a preclinical-stage ADC program (LCB67) targeting DLK-1.

(D) Pyxis has obtained a license to LCB's intellectual property directed to LCB67 in order to Develop and Commercialize Licensed Product under a License executed between the Parties as of December 1, 2020 (the "**License**").

(E) Pyxis shall issue [***] in Pyxis Shares (as defined below) to LCB, share Sublicense Revenue with LCB, and extend to LCB an option to increase its economic interests under the License, to accelerate Pyxis' Development program. LCB and Pyxis may agree to have certain Pyxis payments payable in Pyxis Shares in lieu of cash.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretation

In the Opt-In Agreement, any capitalized terms that are not otherwise defined herein shall have the meanings set forth in the License, and:

(a) "**Equity Terms**" means terms and conditions consistent with the terms and conditions provided to other purchasers of the same or similar class of equity, including voting rights/obligations, participation (excluding, however, any representation on the board), representations and warranties, indemnification and investor rights tag-along, drag-along, registration rights, board observation, information rights, and rights to receive financial statements, in each case no less favorable than preferred investors in purchase and investor agreements.

(b) [***].

(c) "**Initiation**" means the first dosing of the first patient in an applicable clinical trial sponsored by Pyxis, its Affiliates or Sublicensees.

(d) "**Pyxis Financing**" means:

(i) in the case of Initial Shares, Pyxis's first financing completed following the Effective Date, expected to be for Series B Preferred stock or convertible notes; and

(ii) In the case of subsequent issuances of Pyxis Shares in lieu of cash payments, either additional shares of Preferred stock in the financing referenced in subsection (i) above, or if another financing has occurred then preferred stock or convertibles notes in that financing.

(e) "**Pyxis Shares**" means the shares of preferred stock (and/or convertible notes or other securities) being offered in the applicable Pyxis Financing referred to in item (d) above.

(f) "**Share Price**" means the price per share in the applicable financing (or price per unit of other security, including, with respect to convertible notes, taking into account the interest rate and conversion discount to equity securities).

(g) "**Sublicense**" shall have the meaning set forth in the License.

(h) "**Sublicense Revenue(s)**" shall have the meaning set forth in the License.

2. Initial Issuance

2.1 As part of this Opt-In Agreement, Pyxis shall issue to LCB an aggregate of US [***] of Pyxis Shares ("**Initial Shares**") at the Share Price in the Pyxis Financing, on Equity Terms. The closing of the Initial Shares shall take place on the initial closing of the Pyxis Financing ("**Initial Closing Date**").

2.2 In the event that the Initial Closing Date does not occur by the Financing Date in accordance with Section 5.1(b) of the License, Pyxis shall pay to LCB US [***].

3. Sublicense Revenue

3.1 Pyxis shall pay to LCB a percentage of all Sublicense Revenue Pyxis receives in connection with any Sublicense or any assignment of rights to the Licensed Product under the License, depending on the stage of Development of the most advanced Licensed Product that is subject to the applicable Sublicense or assignment. The revenue-sharing percentage to be applied depends on the stage of Development of the most advanced Licensed Product as set forth in the Table below. The Revenue Sharing Percentage will be maintained throughout the term of the applicable Sublicense, and applies to all Sublicense Revenue from such Sublicensee. Pyxis shall notify LCB in writing of any and all Sublicense Revenue falling due immediately and shall, [***] after receipt of payment from the applicable Sublicensee, pay to LCB such percentage of the Sublicense Revenue.

Development stage of the most advanced Licensed Product as of the date of the execution of the Sublicense or assignment	Revenue-Sharing percentage to LCB
[***]	[***]
[***]	[***]
[***]	[***]

If a Sublicense provides for a payment to Pyxis on account of a milestone for which a Regulatory or Sales milestone is also due under the License (e.g., Regulatory Approval), then LCB shall receive the applicable percentage of the Sublicense Revenue received from the Sublicensee [***].

3.2 [***]

3.3 [***]

4. Option Grant and Investment

4.1 Pyxis hereby grants to LCB an option to pay the Opt-In Payment and receive the payment set forth in Section 5 herein (the "**Option**").

(a) The Option will have a term starting on the Effective Date and ending on the date that is [***] after payment to LCB of the Second Payment under the License (the "**Option Term**").

(b) At any time prior to the expiration of the Option Term, LCB may, in its sole discretion, exercise the Option by providing written notice to Pyxis, whereupon LCB shall be entitled to the payment set forth in Section 5.

4.2 If so exercised and LCB has received the Second Payment, Pyxis shall thereafter send an invoice to LCB for the Opt-In Payment. Within [***] of receipt of the invoice from Pyxis, LCB shall pay to Pyxis a one-time, non-refundable, payment of [***] (the "**Opt-In Payment"**).

4.3 If LCB declines to exercise the Option during the Option Term (after the Second Payment is received), the Option shall expire and neither LCB nor Pyxis shall have any further rights or obligations under Section 5 and this Section 4.

5. Extra Milestone Payment.

5.1 As consideration for the Opt-In Payment set out in Section 4.2, Pyxis shall pay to LCB an amount equal to [***] of the Opt-In Payment (the "**Extra Milestone Payment**") upon [***]

6. Additional Shares in Lieu of Cash

6.1 LCB may at any time after the Effective Date elect, with Pyxis's consent, to have Pyxis issue to LCB up to [***] of [***] in Pyxis Shares in the applicable Pyxis Financing rather than cash.

6.2 [***]

6.3 [***].

7. Payments and Taxes.

7.1 All sums due to either Party under the Opt-In Agreement are net of value added tax, sales, use, goods, and services or any similar indirect taxes that, where applicable, will be paid by one Party to the other Party in addition to any other sums due to the other Party under the Opt-In Agreement; and are due in U.S. Dollars, unless at LCB's election, otherwise paid in Pyxis's stock in accordance with the Opt-In Agreement.

7.2 Payment under the Opt-In Agreement is to be made without deduction of income tax or other taxes, charges, or duties of any kind whatsoever that may be imposed, except insofar as is required by applicable laws to withhold tax from the payment to the other Party. If a Party is required by applicable laws to withhold tax from a payment to the other Party under the Opt-In Agreement, then the Party subject to the withholding requirement shall:

(a) deduct such tax from the payment made to the other Party;

(b) timely pay the withheld taxes to the proper taxing authority; and

(c) promptly send proof of payment to the other Party and certify the receipt of the payment by the taxing authority.

7.3 Pyxis shall make any payments due under the Opt-In Agreement to LCB either by itself, or through an Affiliate in the United States or from another jurisdiction where the withholding or similar taxes are no greater than the withholding or other similar taxes deducted from the payments from the United States to the Republic of Korea as of the Effective Date.

7.4 Prior to the imposition of any withholding tax on a payment to a Party, the Party required to withhold shall inform the other Party of its obligation to withhold tax and the Parties shall cooperate and take all steps reasonably and lawfully available to them to avoid such withholding taxes and to obtain double taxation relief under any applicable income tax treaty or otherwise. The Party required by applicable laws to make any such withholding shall provide the other Party with all such certificates or other documents to enable the Parties to obtain a refund of such withheld taxes and any appropriate relief from double taxation of the payment in question.

7.5 **Audit.**

(a) Pyxis shall maintain, and shall cause its Sublicensees to maintain complete and accurate records in sufficient detail to permit LCB to confirm the accuracy of the calculation of payments under the Opt-In Agreement.

(b) Upon reasonable prior notice, but not more than once per calendar year (unless a material discrepancy of greater than a [***] underpayment is found), such records shall be available during regular business hours for a period of three (3) years from the end of the calendar year to which they pertain for examination at the expense of LCB by a nationally recognized independent certified public accountant selected by LCB and reasonably acceptable to Pyxis, for the sole purpose of verifying the correctness of the payments furnished by Pyxis pursuant to the Opt-In Agreement.

(c) Any amounts shown to be owed but unpaid shall be paid within [***] from the accountant's report, plus interest, as set forth in Section 7.6 (Late Payment) from the original due date. Any amounts shown to have been overpaid shall be refunded within [***] from the accountant's report.

(d) LCB shall bear the full cost of such audit unless such audit discloses an underpayment by Pyxis of more than [***] of the amount due, in which case Pyxis shall bear the cost of such audit. The audit rights in this Section 7.5(d) shall survive for three (3) years from the last payment by Pyxis.

7.6 **Late Payment**. If a Party does not receive payment of any sum due to it on or before the due date, such payment will bear interest from the due date until the date of payment at the per annum rate of the lesser of: (i) [***] over the then-current U.S. prime lending rate (as reported in the Wall Street Journal); or (ii) the maximum rate permitted by applicable law.

8. Construction. All other provisions of the License remain unchanged, subject to Article 9 below. In the Opt-In Agreement:

(a) references to persons include all forms of legal entity including an individual, company, corporation, unincorporated association and partnership;

(b) the words "include", "including" and "in particular" are to be construed as being by way of illustration or emphasis only and are not to be construed so as to limit the generality of any words preceding them

(c) the word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under the Opt-In Agreement;

(d) the words "other" and "otherwise" are not to be construed as being limited by any words preceding them;

(e) headings are used for convenience only and do not affect its interpretation; and

(f) a reference to the singular includes a reference to the plural and vice versa and a reference to any gender includes a reference to all other genders.

9. **Inconsistencies**. In the event of any inconsistencies between the Opt-In Agreement and the License, to the extent the License is amended by the application of the Opt-In Agreement or as the context of the Opt-In Agreement may require, the provisions of the Opt-In Agreement shall prevail, and where the License is not amended, the terms of the License will prevail. Except as expressly modified herein, all of the terms and conditions of the License remain in full force and effect.

10. **General.**

10.1 **Governing Law**. The Opt-In Agreement (and any dispute or claim relating to it, its subject matter, its enforceability or its termination, including non-contractual claims) is governed by and construed in accordance with the substantive laws of Massachusetts without regard to its conflicts of law provisions.

10.2 **Amendment**. The Opt-In Agreement may only be amended in writing signed by duly authorized representatives of Pyxis and LCB.

10.3 **Assignment**. Neither Party may assign, mortgage, charge, or otherwise transfer any rights or obligations under the Opt-In Agreement without the prior written consent of the other Party, except with written notice to the other Party before such assignment or transfer, either Party may assign and transfer all its rights and obligations under the Opt-In Agreement if also an assignment or transfer of the License to (i) an Affiliate, or (ii) any person to which it transfers all or substantially all of its assets or business, *provided* that the assignee undertakes in writing to the other Party to be bound by and perform the obligations of the assignor under the License and Opt-In Agreement. Any assignment or attempted assignment by either Party in violation of the terms of this Section 10.3 will be null, void and of no legal effect.

10.4 **Waiver**. No failure or delay on the part of either Party to exercise any right or remedy under the Opt-In Agreement shall be construed or operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude the further exercise of such right or remedy.

10.5 **Termination; Survival**. The Opt-In Agreement may be terminated either (i) with the termination of the License; or (ii) by LCB in accordance with the License. Upon termination, Articles 1, 2, 3 and 6-10 inclusive of the Opt-In Agreement shall survive and remain in full force and effect.

10.6 **Invalid Clauses**. If any provision or part of the Opt-In Agreement is held to be invalid, amendments to the Opt-in Agreement may be made by the addition or deletion of wording as appropriate to remove the invalid part or provision but otherwise retain the provision and the other provisions of the Opt-In Agreement to the maximum extent permissible under applicable law such that the objectives contemplated by the Parties when entering into the Opt-In Agreement may be realized.

10.7 **Counterparts**. For the convenience of the Parties, the Opt-In Agreement may be executed in counterparts and by facsimile or email exchange of pdf signatures, each of which counterpart shall be deemed to be an original, and both of which taken together, shall constitute one agreement binding on the Parties. Each Party acknowledges and agrees that the Opt-In Agreement and all schedules, related documents, amendments and modifications thereof, may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, “electronic signature” shall include faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

*[*Signature *pages follow]*

IN WITNESS WHEREOF, the Parties hereto have executed the Opt-In Agreement as of the day and year first above written.

LegoChem Biosciences Inc.

/s/ Yong-Zu Kim
Yong-Zu Kim

CEO & President

Pyxis Oncology, Inc.

/s/ Lara S. Sullivan
Lara S. Sullivan

CEO & President

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated June 21, 2021, in the Registration Statement (Form S-1) and related Prospectus of Pyxis Oncology, Inc. dated September 17, 2021.

/s/ Ernst & Young LLP

Boston, Massachusetts
September 17, 2021