CytomX Therapeutics

2021 Annual Report

DEAR FELLOW STOCKHOLDERS,

As the world emerges from the COVID-19 pandemic, we are reminded of the importance of scientific innovation and leadership by the biopharmaceutical industry in protecting the health and well-being of people everywhere. It is in this same spirit that CytomX was founded more than a decade ago, with an unyielding commitment to bringing more effective cancer therapies to the patients who need them most. From the very inception of our company, we have embraced innovation and creativity with the strongly held view that making the biggest difference requires different thinking. We are dedicated to destroying cancer, differently.

2021 was a strong year for CytomX – a year in which we reinforced our leadership in the rapidly advancing field of conditionally activated cancer therapies, further demonstrating the power and utility of our Probody® therapeutic platform by advancing our clinical pipeline towards key milestones. The breadth of our multi-modality technology is embodied in the wide range of novel product candidates we are advancing through our extensive research and development activities.

During 2021, we made broad progress in advancing four distinct Probody therapeutic modalities within our pipeline, each reflecting a unique way to apply our novel technology and, collectively, opening opportunities for CytomX to make a difference in the treatment of many cancer types.

Firstly, we continued our Phase 2 clinical evaluation of the conditionally activated antibody-drug conjugate candidates praluzatamab ravtansine (CX-2009) and CX-2029. The CytomX team overcame pandemic-related challenges to drive patient enrollment in the three-arm breast cancer Phase 2 study for praluzatamab and we also delivered on our promise of initial Phase 2 data for CX-2029, in which we saw encouraging preliminary results in patients with squamous lung cancer. In 2022, we look forward to presenting initial breast cancer results data for the praluzatamab Phase 2 trial, and to additional progress in the expansion phase of the CX-2029 study in collaboration with our partner AbbVie.

The second Probody modality to make significant progress in 2021 is embodied in our work with our collaboration partner, Bristol Myers Squibb, advancing the anti-CTLA-4 Probody, BMS-986249. This conditionally activated checkpoint inhibitor is designed to improve upon Yervoy®, the prototypical immunotherapy first approved for clinical use in 2011. In 2021, Bristol Myers Squibb continued to enroll patients into a randomized Phase 2 clinical study of BMS-986249, plus or minus Opdivo®, in first line metastatic melanoma. In addition, Bristol Myers Squibb expanded their Phase 2 evaluation of the BMS-986249 plus Opdivo combination to liver, prostate and triple-negative breast cancers. We continue to work closely with our partner and look forward to seeing Phase 2 clinical results from this important program in due course.

Thirdly, our clinical development progress over the last year also included the initiation of our first-in-human clinical study for CX-904, our prototypical conditional, T-cell-engaging bispecific antibody with the filing of our investigational new drug application (IND). CX-904 targets the validated cancer target, EGFR, which is present on many different solid tumor types, presenting a broad opportunity for this therapeutic candidate to make a difference for cancer patients. This powerful bispecific modality is designed to utilize the Probody platform to stimulate immune cells to target and kill cancer cells safely and effectively and has already allowed CytomX to form important collaboration partnerships with Amgen and Astellas.

A fourth therapeutic concept for which CytomX researchers made terrific progress in 2021 is the application of our Probody technology to the field of cytokines, with the goal of harnessing the powerful anti-cancer activity of these multi-functional immune modulators. As a first step within a broad CytomX effort in this area, we are excited to have created a novel, masked version of interferon alpha. Interferon therapy, if harnessed effectively, has the potential to direct the immune system to destroy tumor cells and we are eager to translate our encouraging preclinical data into the evaluation of this mechanism in cancer patients as soon as possible.

With a deep and differentiated portfolio of Probody therapeutics, a world-class team, and strong collaboration partnerships, we are well on our way to delivering on our vision of bringing more effective therapies to people with cancer, while fostering a unique, patient-focused culture of execution, alignment and accountability centered around our mission to become a long-term, multi-product, commercial biopharmaceutical company.

The extraordinary innovation within the CytomX pipeline is driven by our passionate team and our dedication to destroying cancer, differently. The word “different” is also deeply embraced by CytomX in our commitment to diversity, equity, and inclusion. We are extremely proud of the cultural diversity across our organization. With regard to gender diversity, we have a fifty percent female executive team, a female President, and strong representation of women on our board of directors. More broadly, CytomX supports a grass roots diversity, equity and inclusion team with participation and membership from all levels of the organization, including the Chief Executive Officer.

Within our community, we conduct outreach to support STEM education and career pathway awareness for the next generation of biopharma leaders by hosting local events for under-represented and minority students in partnership with local school districts. We are also closely involved in the statewide racial and social equity initiatives of California Life Sciences where I am proud to participate as a Board and Executive Committee member.

I would like to extend my sincere thanks to the CytomX team for their ongoing dedication and commitment to our vision and mission. On behalf of our entire Board of Directors, management and all of our employees, I also want to thank you for your continued trust and support as we work tirelessly towards making the biggest difference possible in the fight against cancer.

Sincerely,

Sean A. McCarthy, D. Phil.
Chief Executive Officer and Chairman

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to
Commission File Number 001-37587

CytomX Therapeutics, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**27-3521219**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
151 Oyster Point Boulevard, Suite 400 South San Francisco, California	**94080**
(Address of principal executive offices)	**(Zip Code)**

(650) 515-3185
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.00001 par value	**CTMX**	**The Nasdaq Global Select Market**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the issuer (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2021, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $408.3 million, based on the closing price of the registrant's common stock on the Nasdaq Global Select Market on June 30, 2021 of $6.33 per share. Shares of the registrant's common stock held by each officer and director and each person known to the registrant to own 10% or more of the outstanding common stock of the registrant have been excluded in that such persons may be deemed affiliates. This determination of affiliate status is not a determination for other purposes.

As of January 31, 2022, 65,392,758 shares of the registrant's common stock, $0.00001 par value per share, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed for its 2022 Annual Meeting of Stockholders are incorporated by reference into Part III hereof. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

CYTOMX THERAPEUTICS, INC.
ANNUAL REPORT ON FORM 10-K
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Forward-Looking Statements

This Annual Report on Form 10-K contains certain forward-looking statements that involve risks and uncertainties. These forward-looking statements reflect our current views with respect to, among other things, future events and our financial performance. These statements are often, but not always, made through the use of words or phrases such as "may," "might," "should," "could," "predict," "potential," "believe," "expect," "continue," "will," "anticipate," "seek," "estimate," "intend," "plan," "projection," "would," "annualized" and "outlook," or the negative version of those words or other comparable words or phrases of a future or forward-looking nature. These forward-looking statements are not historical facts, and are based on current expectations, estimates and projections about our industry, management's beliefs and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond our control. Accordingly, we caution you that any such forward-looking statements are not guarantees of future performance and are subject to risks, assumptions, estimates and uncertainties that are difficult to predict. Although we believe that the expectations reflected in these forward-looking statements are reasonable as of the date made, actual results may prove to be materially different from the results expressed or implied by the forward-looking statements.

A number of important factors could cause our actual results to differ materially from those indicated in these forward-looking statements, including those factors identified in "Risk Factors" or "Management's Discussion and Analysis of Financial Condition and Results of Operations" or the following:

- the extent to which the COVID-19 pandemic and related governmental regulations and restrictions may impact our business, including our research, clinical trials, which include ongoing site initiation and patient enrollment, manufacturing and financial condition;
- our expectations regarding the potential benefits, activity, effectiveness and safety of our product candidates and therapeutics developed utilizing our Probody® platform technology;
- the initiation, timing, progress and results of our ongoing clinical trials, research and development programs, preclinical studies, and Investigational New Drug Application ("IND"), Clinical Trial Application, New Drug Application ("NDA"), Biologics License Application ("BLA"); and other regulatory submissions;
- the timing of the completion of our ongoing clinical trials and the timing and availability of clinical data from such clinical trials;
- our ability to identify and develop additional product candidates;
- our dependence on collaborators for developing, obtaining regulatory approval for and commercializing product candidates in the collaboration;
- our or a collaborator's ability to obtain and maintain regulatory approval of any of our product candidates;
- our receipt and timing of any milestone payments or royalties under any research collaboration and license agreements or arrangements;
- our expectations and beliefs regarding the evolution of the market for cancer therapies and development of the immuno-oncology industry;
- the rate and degree of market acceptance of any approved product candidates;
- the commercialization of any approved product candidates;
- our ability to establish and maintain collaborations and retain commercial rights for our product candidates in such collaborations;
- the implementation of our business model and strategic plans for our business, technologies and product candidates;
- our estimates of our expenses, ongoing losses, future revenue and capital requirements;
- our ability to obtain additional funds for our operations;
- our or any collaborator's ability to obtain and maintain intellectual property protection for our technologies and product candidates and our ability to operate our business without infringing the intellectual property rights of others;
- our reliance on third parties to conduct our preclinical studies or any future clinical trials;
- our reliance on third-party supply and manufacturing partners to supply the materials and components for, and manufacture, our research and development, preclinical and clinical trial product supplies;

- our ability to attract and retain qualified key management and technical personnel;
- our ability to secure and maintain licenses of intellectual property to protect our technologies and product candidates;
- our financial performance; and
- developments relating to our competitors or our industry.

Any forward-looking statements in this Annual Report on Form 10-K reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other 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 these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Part I, Item 1A. Risk Factors and discussed elsewhere in this Annual Report on Form 10-K. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This Annual Report on Form 10-K also contains estimates, projections and other information concerning our industry, our business and the markets for certain drugs and therapeutic biologics, including data regarding the estimated size of those markets, their projected growth rates and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained these industry, business, market and other data from reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which these data are derived.

Except where the context otherwise requires, in this Annual Report on Form 10-K, “we,” “us,” “our” and the “Company” refer to CytomX Therapeutics, Inc.

Trademarks

This Annual Report on Form 10-K includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this Annual Report on Form 10-K are the property of their respective owners.

PART I

Item 1. *Business*

Overview

We are a clinical-stage, oncology-focused biopharmaceutical company dedicated to destroying cancer differently. We aim to build a commercial enterprise to maximize our impact on the treatment of cancer. By pioneering a novel class of conditionally activated biologic candidates, powered by our Probody® therapeutic technology platform, we lead the field of conditionally activated oncology therapeutics and have established conditional activation as a strategic area of biologics research and development. Our goal is to transcend the limits of current cancer treatments by successfully leveraging therapeutic targets and strategies that were once thought to be inaccessible.

Our proprietary, unique and versatile Probody technology platform is designed to enable conditional activation of biologic therapeutic candidates within the tumor microenvironment while minimizing drug activity in healthy tissues and circulation. Our industry-leading platform is built on a strong foundation of tumor biology expertise including deep knowledge of tumor-associated enzymes known as proteases. Proteases are tightly controlled in normal tissues but often poorly regulated and active in tumor microenvironments where they play important roles in cancer cell migration, invasion and metastasis. Leveraging our deep scientific knowledge, we conceived of and constructed our Probody therapeutic platform which allows us to genetically engineer biologic therapeutic candidates to contain protease-cleavable masks. Our masking strategy is designed to reduce binding of biologic drugs to their targets until the mask is removed by proteases in the tumor microenvironment, providing more selective targeting of the tumor. We believe this innovative approach has the potential to improve cancer treatment in three ways:

1. Allowing the pursuit of high potential targets that were previously considered "undruggable" due to their ubiquitous expression on normal tissues;
2. Enhancing a potential product's "therapeutic window," the balance between tolerability and anti-tumor activity; and
3. Enabling the development of new combination therapies, including immunotherapies, by improving tolerability.

We are employing our leading, conditional activation platform technology to address some of the biggest challenges today in oncology biologics research and development. These include the validation of potential new targets for antibody-drug conjugates ("ADCs"), opening solid tumor opportunities for T-cell engaging bispecific antibodies ("TCBs"), and increasing the therapeutic window for immune modulators such as cytokines and checkpoint inhibitors ("CPIs").

We have utilized our multi-modality Probody platform to build a promising pipeline of potential first-in-class and best-in-class therapeutics that encompasses six novel product candidates, four of which are currently in multiple Phase 2 clinical studies in nine cancer indications. These include the conditionally activated ADCs praluzatamab ravtansine (CX-2009, targeting CD166) and CX-2029 (targeting CD71), and the Probody immune CPIs pacmilimab (CX-072, targeting PD-L1) and BMS-986249 (targeting CTLA-4).

Underscoring our commitment to destroying cancer differently, we have recently advanced a new Probody modality into the clinic. CX-904 is our first conditionally activated TCB, targeting the epidermal growth factor receptor ("EGFR") on tumor cells and the CD3 receptor on T cells. In January 2022, the investigational new drug application ("IND") for the program was allowed to proceed by the U.S. Food and Drug Administration ("FDA"). We are in the process of initiating a first-in-human Phase 1 study of CX-904 in patients with advanced solid tumors and expect to dose the first patient in the first half of 2022. We are also developing CX-2043, our third conditionally activated ADC directed toward epithelial cell adhesion molecule, EpCAM/Trop-1, currently in preclinical studies, as well as other discovery stage programs across multiple modalities.

Our Corporate Strategy

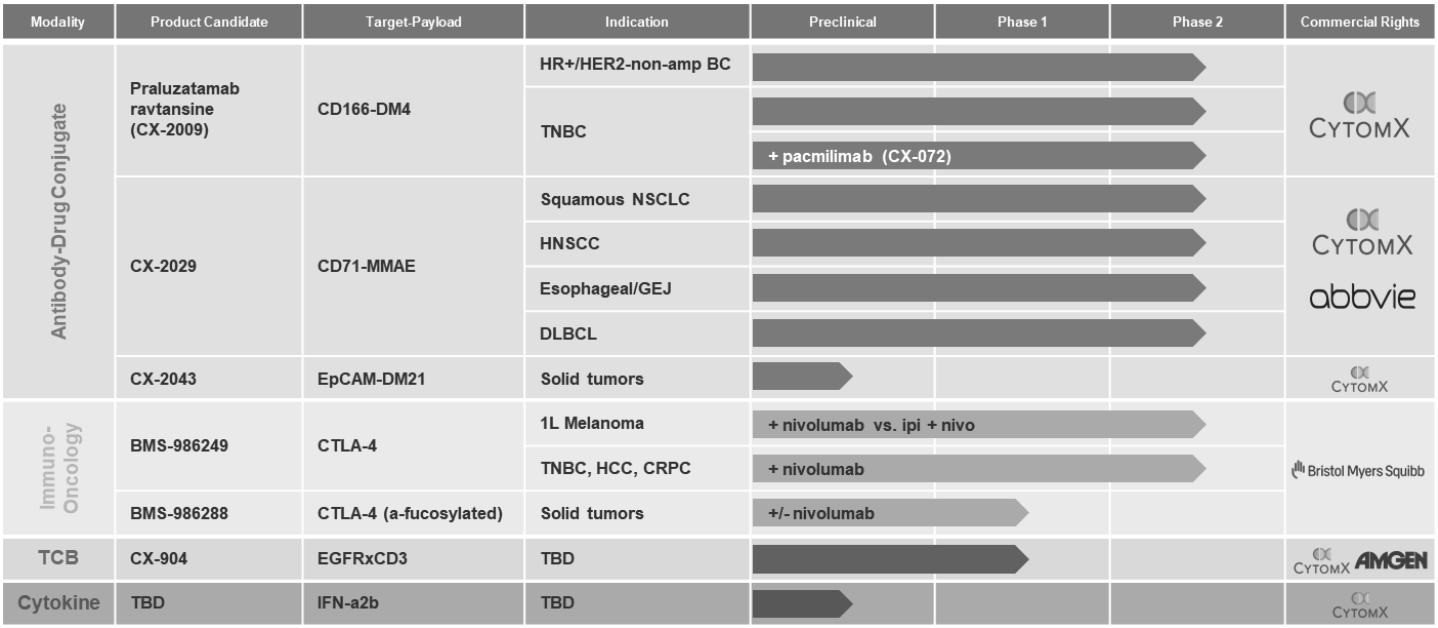
We are utilizing our industry-leading, proprietary, versatile, and tunable Probody platform to create a robust pipeline of biologic therapeutics to improve the lives of people with cancer and to build a long-term, multi-product, commercial biopharmaceutical company. We aim to achieve this goal by:

- Advancing potentially first-in-class therapies against high potential, novel targets that have not yet been developed because of broad expression in healthy tissue. Praluzatamab ravtansine and CX-2029, targeting CD166 and CD71, respectively, are our most advanced programs in this class.
- Continuing our leadership in the field of conditional activation of biologic therapeutics by advancing new therapeutic formats into the clinic. We are in the process of initiating our Phase 1 study of CX-904 after our IND was allowed to proceed by the FDA in January 2022. The CX-904 IND marks the sixth therapeutic candidate and the third treatment modality overall to enter the clinic from the Probody platform.

- Developing novel and improved combination therapies based on validated immuno-oncology targets and pathways that have the potential to improve outcomes for cancer patients. Our partner, Bristol Myers Squibb Company ("Bristol Myers Squibb"), is progressing two Probody anti-CTLA-4 inhibitors, BMS-986249 and BMS-986288, in combination with nivolumab, a PD-1 inhibitor, in multiple solid tumors. Additionally, we are studying our conditionally activated anti-PD-L1 therapeutic candidate, pacmilimab (CX-072), in combination with praluzatamab ravtansine in breast cancer.
- Partnering with leading global biopharmaceutical companies to access capital, additional resources and expertise, as well as increase the number of Probody therapeutic candidates being advanced into clinical studies. To date, we have formed several strategic alliances with major multinational drug companies, including AbbVie, Inc. ("AbbVie"), Amgen, Inc. ("Amgen"), Bristol Myers Squibb, and Astellas Pharma Inc. ("Astellas").
- Fostering a unique, patient-focused culture of execution, alignment and accountability centered around our vision, mission and values.

Our Pipeline of Conditionally Activated Product Candidates

We are leveraging our Probody platform to build a robust pipeline of potential first-in-class and best-in-class anti-cancer therapies. We currently retain worldwide development and commercialization rights to two of our most advanced Probody therapeutics in the clinic, praluzatamab ravtansine and pacmilimab. Additionally, we are advancing multiple partnered development programs in the clinic, including CX-2029 in collaboration with AbbVie, BMS-986249 and BMS-986288 partnered with Bristol Myers Squibb, and the Amgen-partnered CX-904. The table below depicts the current status of our conditionally activated product candidates that are in clinical and preclinical development:



CytomX Pipeline of Conditionally Activated Probody Therapeutics

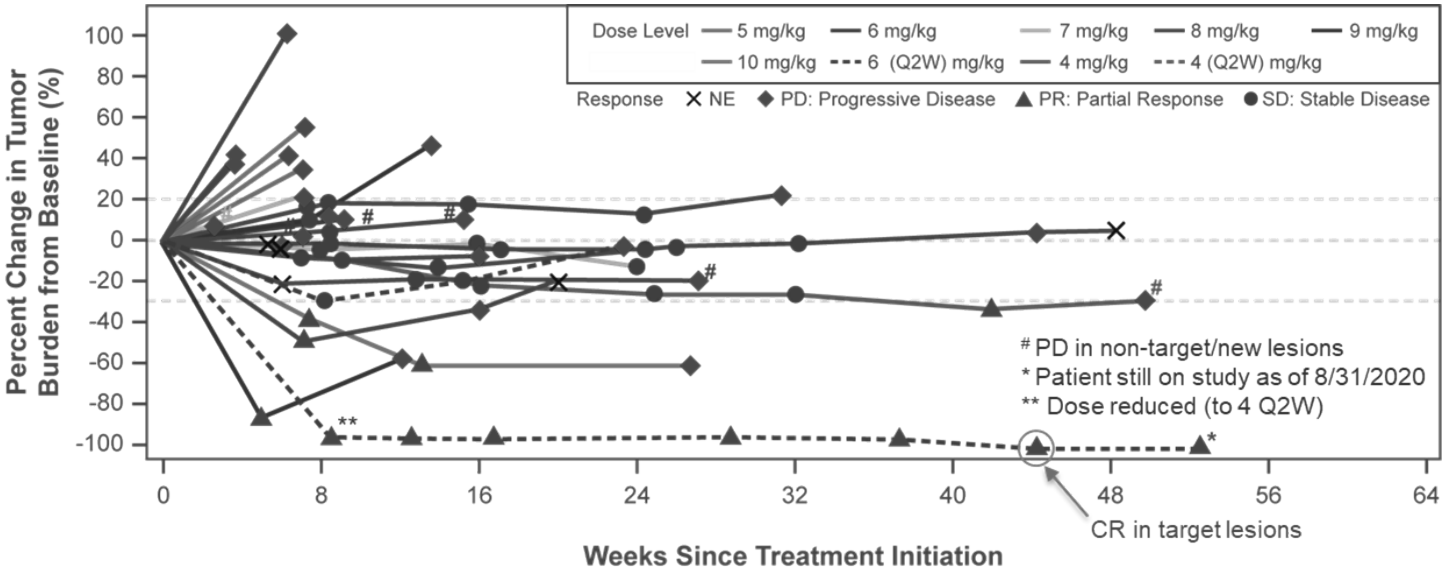
Praluzatamab Ravtansine (CX-2009): A Potentially First-in-Class Conditionally Activated ADC Targeting CD-166

With more than ten ADCs approved in the United States, this drug class is now well established as an effective therapeutic strategy for the treatment of cancer. However, conventional ADCs are restricted to targeting proteins that are expressed highly in tumors, but with little or no expression in healthy tissues, in order to avoid undesirable on-target toxicities. Few cancer-associated proteins have this desirable profile, thereby limiting the utility of conventional ADCs.

Our therapeutic strategy with conditionally activated ADCs is to leverage targets to achieve binding to tumor cells, and to effect cancer cell killing via a cytotoxic payload conjugated to the antibody. Our Probody platform is designed to reduce on-target toxicities that otherwise may occur with conventional ADCs. We do not mask the cytotoxic payload in our conditionally activated ADCs, and therefore some payload-related toxicities are expected. Furthermore, payload toxicities may offer an indication that therapeutically active levels of the drug conjugate are being achieved.

Praluzatamab ravtansine, our wholly-owned lead product candidate, is a potential first-in-class conditionally activated ADC directed toward CD166. CD166 is a tumor target previously considered undruggable with a conventional ADC therapy due to its high expression on normal tissues, but that has been validated as a potential target at CytomX. Praluzatamab ravtansine is conjugated with the potent microtubule inhibiting payload DM4, a chemotherapeutic agent in the maytansine class, licensed from ImmunoGen.

We have completed a Phase 1 dose-finding, multi-cohort study involving heavily-pretreated patients. These first-in-human data were published in the peer-reviewed journal *Clinical Cancer Research* in February 2022, in which we reported encouraging anti-cancer activity in patients with triple-negative breast cancer ("TNBC") and hormone receptor-positive ("HR+"), human epidermal growth factor receptor 2 ("HER2")-non-amplified breast cancer, among others. In particular, clinical benefit rates ("CBR") in breast cancer of 41% and 28% were observed at 16 and 24 weeks ("CBR16" and "CBR 24"), respectively, with all four patients with TNBC who achieved CBR16 maintaining it at CBR24. Praluzatamab ravtansine was generally well tolerated at doses up to 7 mg/kg administered every three weeks, with mostly DM4-related toxicities, including ocular, neuropathic, and hepatic.



Observed Responses and Durability in Breast Cancer with Praluzatamab Ravtansine (CX-2009) at Doses ≥4 mg/kg Q3W as of August 31, 2020

In December 2020, we initiated a three-arm, Phase 2 study of praluzatamab ravtansine in HER2-non amplified breast cancer. The first two arms, Arms A and B, will evaluate praluzatamab ravtansine as monotherapy, with Arm A focusing on patients with HR+, HER2-non-amplified breast cancer and Arm B in patients with TNBC. Arm C will study praluzatamab ravtansine in combination with pacmilimab in patients with TNBC. We expect initial data for Arms A and B to be available in the second half of 2022.

According to the American Cancer Society, an estimated 287,850 new cases of invasive breast cancer are expected to be diagnosed in women in the United States in 2022, making it the most frequently diagnosed cancer in women. HR+/HER2– and TNBC subtypes, collectively HER2-non-amplified, is the largest segment of breast cancer, accounting for greater than 80% of patients with advanced breast cancer. Patients with HR+ breast cancer are treated with hormone-based therapy, which can be single-agent or combination therapy (including CDK4/6 or mTOR inhibition). If their cancer progresses, patients may require more aggressive cytotoxic chemotherapy and this late-stage disease setting represents a significant unmet need for more efficacious treatment options. For TNBC, given this tumor subtype lacks estrogen or progesterone receptors and the HER2 protein, chemotherapy is the main systemic treatment option. The combination of immune CPI and chemotherapy has recently been approved by the FDA for patients with advanced, previously-untreated TNBC that expresses the PD-L1 marker. For patients who have tried at least 2 other drug treatments, the ADC, sacituzumab govitecan, might be an option. Despite these recent advances, significant need exists for novel treatment options for these patients.

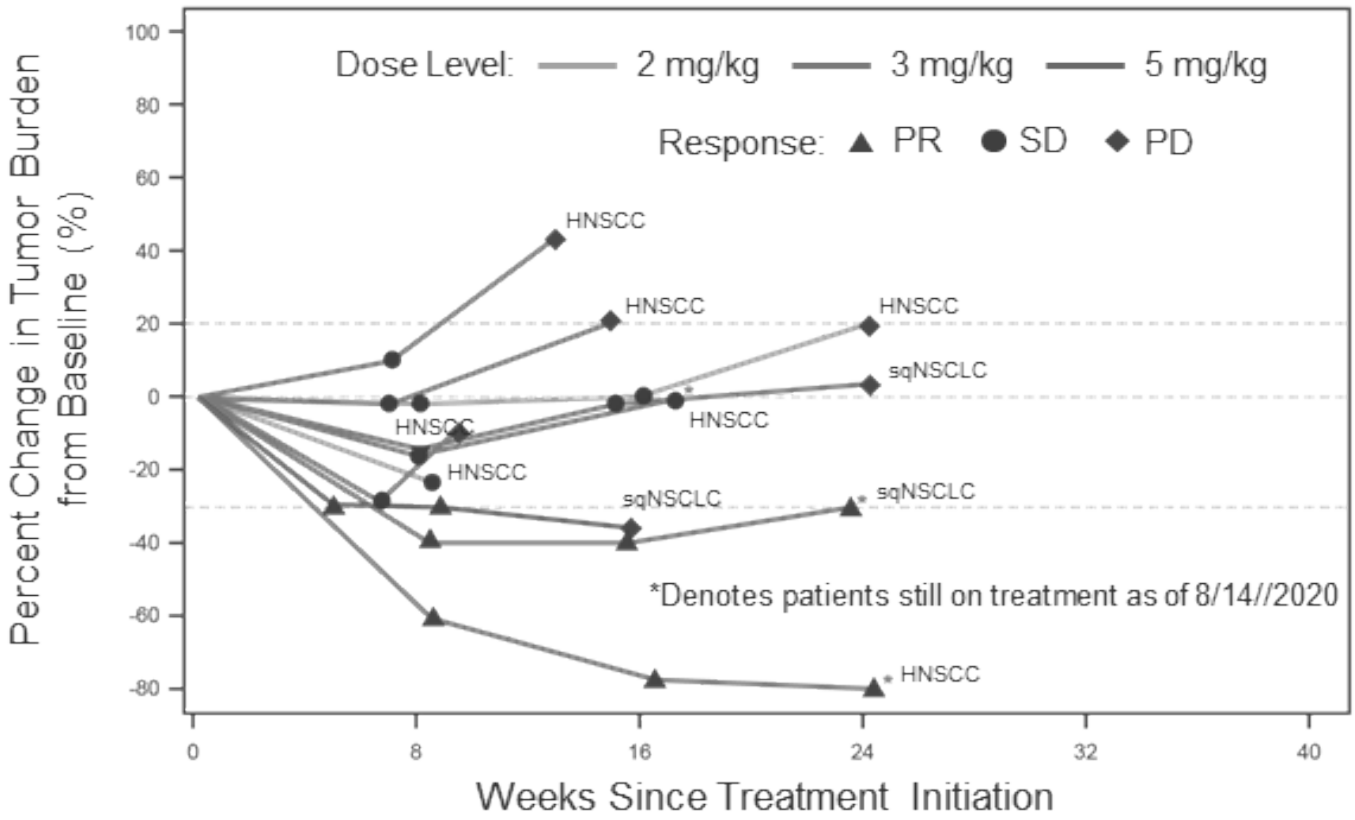
CX-2029: A Potentially First-in-Class Conditionally Activated ADC Targeting CD71, The Transferrin Receptor

Our second lead conditionally activated ADC is CX-2029, which we are advancing in a global co-development collaboration with AbbVie. This program is intended to open a therapeutic window for successful targeting of CD71, also known as the transferrin receptor 1 ("TfR1"). CD71 is a cell surface protein essential for iron uptake in dividing cells and is highly expressed in a number of solid and hematologic cancers. However, given its central role in iron metabolism, CD71 is present on most healthy cells and is

thought to be an undruggable target with conventional ADCs. CX-2029 is conjugated with the tubulin inhibitor, monomethyl auristatin E ("MMAE"), as the payload.

In 2020, we completed the dose-escalation phase of an ongoing Phase 1/2 clinical study, for which we received a $40 million milestone payment from AbbVie. We published these first-in-human data in the peer-reviewed journal *Clinical Cancer Research* in June 2021. A total of 45 patients with advanced solid tumors were enrolled to receive CX-2029 intravenously every three weeks at dose levels ranging from 0.1 mg/kg to 5 mg/kg. At doses of 0.25 mg/kg to 5 mg/kg, more than 90% of CX-2029 circulated predominantly as the intact species. CX-2029 was generally well tolerated at doses up to 3 mg/kg, with infusion related reactions, anemia, and neutropenia as the most common dose-dependent adverse events. Neutropenia is commonly associated with the MMAE payload. The etiology of anemia is under investigation and is likely multifactorial. The MMAE payload is also known to be associated with anemia, and preclinical studies have shown that reduction of red blood cell precursors has been observed in response to targeting CD71, which is known to play a role in early erythroid development. Anemia was managed with transfusions and supportive care. Additionally, no CX-2029 treatment related deaths were reported, and no patient withdrew from the dose-escalation phase of the clinical trial due to anemia.

Encouraging preliminary clinical activity was observed at doses of 2 mg/kg and higher. Notably, three of four patients with squamous non-small cell lung carcinoma ("sqNSCLC") had stable disease ("SD") or better, including two confirmed partial responses ("PRs") (at doses of 3 and 5 mg/kg); and seven of eight patients with head and neck squamous cell carcinoma ("HNSCC") had SD or better, including one confirmed PR at 3 mg/kg.



Observed Responses and Durability in sqNSCLC and HNSCC with CX-2029 at Doses ≥2 mg/kg Q3W as of August 14, 2020

In November 2020, we expanded this study into a four-cohort Phase 2 expansion, designed to evaluate CX-2029 as a monotherapy in patients with sqNSCLC, HNSCC, esophageal and gastro-esophageal junction cancers, and diffuse large B-cell lymphoma ("DLBCL"). Preliminary data for the sqNSCLC and HNSCC cohorts were disclosed in December 2021. As of the data cutoff on October 29, 2021, 23 patients with sqNSCLC and 29 patients with HNSCC had received at least one dose of CX-2029 (safety population), of whom 16 sqNSCLC patients and 25 HNSCC patients had at least one post baseline assessment (efficacy-evaluable population). For the sqNSCLC cohort, an objective response rate ("ORR") by local investigator of 18.8% was observed in the 16 efficacy-evaluable patients, including two confirmed PRs and one unconfirmed PR that confirmed seven days after the data cutoff. Two of these responses were ongoing as of the data cutoff and the third had a response duration of 5.6 months. The disease control rate ("DCR"),

which includes patients with a complete response, PR, or stable disease, was 87.5%. The sqNSCLC cohort continues to enroll patients towards the goal of 25 efficacy-evaluable patients. In the 25 efficacy-evaluable patients with HNSCC, the ORR was 4.0%, with a 56.0% DCR, including one unconfirmed PR which will not confirm. The HNSCC cohort has completed enrollment.

The preliminary safety profile of CX-2029 in the Phase 2 expansion was consistent with previous Phase 1 observations, with no new safety signals identified. The most common treatment-related adverse events ("TRAEs") in 10% or more of patients (All Grade, Grade 3) were anemia (78.8%, 67.3%), infusion related reactions (69.2%, 3.8%), fatigue (19.2%, 1.9%), and nausea (13.5%, 0.0%), and decreased neutrophil count (13.6%, 9.6% (plus one Grade 4 event 1.9%)). The most common reason for treatment discontinuation was disease progression (44.2%), three patients (5.8%) discontinued for a treatment-related adverse event (anemia; 2 Grade 2, 1 Grade 3). TRAEs leading to dose interruption or reduction were 40.4% and 34.6%, respectively. Thirteen patients, eight with sqNSCLC and five with HNSCC, were still on treatment as of the data cut off. Patient enrollment continues in the CX-2029 expansion phase and we plan to provide certain additional data updates in 2022.

Lung cancer is the leading cause of death from all cancers globally, resulting in more than 1.8 million deaths per year. Greater than 80% of lung cancers are NSCLC and the main subtypes of NSCLC are adenocarcinoma, squamous cell carcinoma, and large cell carcinoma, with squamous cell representing approximately 30%. While a number of immune CPIs have been approved by the FDA for NSCLC treatment, patients who failed these agents have limited treatment options, representing a potentially significant opportunity for CX-2029 to address. Head and neck cancers include cancers in the larynx, throat, lips, mouth, nose, and salivary glands, and represent the 6th most common cancer worldwide, resulting in 350,000 deaths annually, whereas it is the 8th most commonly diagnosed cancer in the United States, accounting for approximately 11,500 deaths annually. The most common types of esophageal cancer are adenocarcinoma and squamous cell carcinoma, with squamous cell accounting for about 90% of the global annual incidence of 456,000. DLBCL is the most common aggressive subtype of non-Hodgkin lymphoma, constituting up to 40% of cases globally and more than 18,000 people diagnosed with the malignancy each year in the United States. Despite recent advances in cancer treatment, including the advent of immuno-oncology therapy, significant unmet need remains for these four cancer types.

Pacmilimab (CX-072): A Probody Therapeutic Targeting PD-L1

Our most advanced wholly-owned immuno-oncology product candidate is pacmilimab, a Probody therapeutic against PD-L1, a clinically and commercially validated cancer target. The PD pathway consists principally of two targets: PD-1, which is typically expressed on T-cells, and PD-L1, which is typically expressed on the tumor cells as well as on healthy tissue. In healthy tissue, PD-1 and PD-L1 work together to negatively regulate immune response and maintain tolerance between the immune system and healthy tissue. Tumors, however, upregulate PD-L1 to evade immune surveillance by the host's immune system. Therefore, development of antibodies against PD-1 and PD-L1 have become a key focal point in cancer drug development, with multiple PD-1 antibodies including nivolumab (Opdivo®), pembrolizumab (Keytruda®), and cemiplimab (Libtayo®) and multiple PD-L1 antibodies including atezolizumab (Tecentriq®), durvalumab (Imfinzi®), and avelumab (Bavencio®) approved by the FDA. There continue to be many other PD pathway inhibitors in clinical development. In addition to assessment as single agents, PD-1 and PD-L1 antibodies have been studied extensively as the centerpiece of oncology combination therapies.

While inhibitors of the PD-L1 and/or PD-1 pathway offer the potential for clinical benefit in patients with a wide-variety of cancer types, there are a number of risks imposed by administration of these agents. According to U.S. labels for Opdivo, Keytruda, Tecentriq, Bavencio, and Imfinzi, the most common side effects (defined as either >15% or >20%, depending upon the agent) that were observed with commercially available anti-PD-L1 and anti-PD-1 agents include: fatigue, decreased appetite, nausea, vomiting, diarrhea, dyspnea, constipation, cough, musculoskeletal pain, back pain, abdominal pain, arthralgia, urinary tract infection, upper respiratory tract infection, peripheral edema, infusion-related reaction, rash, asthenia, pruritus, headache, and pyrexia.

Combining a PD pathway inhibitor with another anti-cancer agent often results in significantly greater toxicity than monotherapy alone. One example is the combination of atezolizumab and paclitaxel protein-bound, or nab-paclitaxel, which was approved in the United States for the treatment of adult patients with unresectable locally advanced or metastatic TNBC whose tumors express ≥ 1% of PD-L1, as determined by an FDA approved test. According to data reported in 2018 in The New England Journal of Medicine, the combination of atezolizumab at a dose of 840 mg and nab-paclitaxel at a dose of 100 mg per square meter of body-surface resulted in Grade 3/4 treatment related adverse events ("TRAEs") in 48.7% of the patients treated versus 42.2% in the placebo-nab-paclitaxel group, and drug discontinuations in 6.4% of the patients treated, compared to 1.4% in the placebo group.

We believe that a locally activated Probody therapeutic targeting PD-L1 has the potential to maintain the anti-tumor activity of the PD pathway blockade while reducing the autoimmunity that results from blocking such pathway systemically. As such, we believe that pacmilimab has the potential to enable combination therapies that cannot be appropriately dosed because of synergistic toxicity, and ultimately that pacmilimab may have the potential to play an important role in combination therapy. Pacmilimab may also ultimately prove to be a safer monotherapy than existing PD inhibitors which could have specific applications in certain clinical settings.

In July 2021, we published two manuscripts in the Journal for ImmunoTherapy of Cancer: (1) pacmilimab monotherapy at the recommended Phase 2 dose of 10 mg/kg every 14 days in 114 patients and (2) paclimimab in combination with ipilimumab in 27 patients; all patients were heavily-pretreated. Both studies demonstrated a low rate of immune-mediated toxicity. Additionally, pacmilimab monotherapy showed signs of anti-tumor activity in patients not selected for high PD-L1 expression but had tumors that are sensitive to immune checkpoint inhibition, including TNBC, anal squamous cell carcinoma, cutaneous squamous cell carcinoma, and tumors with high mutational burden.

Based on this potentially differentiated profile of a favorable tolerability and clear evidence of anti-cancer activity, we are studying pacmilimab in combination with praluzatamab ravtansine in a Phase 2 study in TNBC and continue to evaluate additional combination partners for pacmilimab.

BMS-986249 and BMS-986288

In collaboration with our partner, Bristol Myers Squibb, we are developing BMS-986249 and BMS-986288, Probody versions of ipilimumab. Ipilimumab, sold under the brand name Yervoy®, is a monoclonal antibody that targets CTLA-4, a checkpoint protein receptor that downregulates the immune system. In the United States, ipilimumab has been approved by the FDA to treat melanoma as a single agent and in combination with nivolumab, an anti-PD-1 antibody, for colorectal cancer, hepatocellular carcinoma, malignant pleural mesothelioma, NSCLC, and renal cell carcinoma. While treatment with ipilimumab as a monotherapy or in combination with nivolumab has resulted in clinically meaningful anti-tumor activity in these malignancies, highlighted by the recently updated median overall survival of 72.1 months for the combination in the Phase 3 study of nivolumab or nivolumab plus ipilimumab versus ipilimumab alone in previously-untreated advanced melanoma ("CheckMate 067"), ipilimumab has a narrow therapeutic window and the FDA approved label has a warning about potential severe and fatal immune-related adverse events. We believe our CTLA-4-targeting Probody therapeutic may be able to effectively localize the anti-CTLA-4 antibody activity to the tumor microenvironment, thereby limiting systemic toxicities normally seen with ipilimumab, which could improve the benefit/risk profile of anti-CTLA-4 containing treatment regimens.

In an ongoing Phase 1/2 study conducted by Bristol Myers Squibb in patients with advanced cancers, Bristol Myers Squibb reported at ASCO 2020 preliminary data indicating that escalating doses of BMS-986249 ranging from 240 mg to 2400 mg (approximately 3 to 30 mg/kg of ipilimumab) were found to be generally well tolerated, either as a single agent or in combination with nivolumab. In February 2020, Bristol Myers Squibb initiated a randomized Phase 2 study cohort expansion in combination with nivolumab in patients with previously-untreated unresectable stage III-IV melanoma which resulted in a $10 million milestone payment from Bristol Myers Squibb. This study has been modified to include three additional single-arm cohorts: advanced hepatocellular carcinoma, metastatic castration-resistant prostate cancer, and unresectable locally advanced or metastatic TNBC.

For BMS-986288, a Probody version of non-fuscosylated ipilimumab, Bristol Myers Squibb is evaluating its safety and efficacy alone and in combination with nivolumab in an ongoing Phase 1/2 study in patients with selected advanced solid tumors.

CX-904

We have also extended our Probody platform to the new and promising modality of T-cell engaging bispecific antibodies (“TCBs”). Conventional TCBs are a highly potent therapeutic modality designed to direct the activity of cytotoxic T cells to tumors. TCBs such as the BiTE® molecule, Blincyto®, a CD19-directed TCB commercialized by Amgen, have shown clinical activity in hematologic malignancies, but development of TCBs for solid tumor indications is proving challenging. Due to their high potency, TCBs can target normal tissues with low antigen expression, which may result in significant toxicity challenges. We believe such challenges could be addressed using our Probody platform by localizing the activity of TCBs to the tumor microenvironment thereby improving the therapeutic window for TCBs in solid tumors.

Our most advanced program in this modality is CX-904, a conditionally activated epidermal growth factor receptor-CD3 (“EGFRxCD3”) TCB, which we partnered with Amgen. In preclinical studies, CytomX’s Probody EGFRxCD3 bispecific therapeutics demonstrated anti-tumor activity and better tolerability when compared to EGFRxCD3 bispecifics without Probody masking. Additionally, while we believe our preclinical studies show that we have the potential to reach a favorable therapeutic index, clinical data will be necessary to specify an acceptable dose. In January 2022, the IND for CX-904 was allowed to proceed by the FDA. We are in the process of initiating a first-in-human Phase 1 study in patients with advanced solid tumors and expect to dose the first patient in the first half of 2022.

Preclinical Product Candidates and Research

We are actively broadening the potential application of our Probody platform technology to multiple other product candidates, including additional potential first-in-class conditionally activated ADC product candidates, investigational TCBs and cytokines.

Anti-Trop-1 (EpCAM) Conditionally Activated ADC Program

Trop-1 or epithelial cell adhesion molecule ("EpCAM") is a target that is highly expressed on a wide variety of tumor types. It has been, however, a difficult target to drug due to its wide expression on normal tissues. An EpCAM-targeting conditionally activated ADC program, CX-2043, was originally developed by ImmunoGen utilizing our Probody technology and ImmunoGen's next-generation linker chemistry and novel maytansinoid payload, DM21. At the 2018 European Antibody Congress and the 2019 American Association for Cancer Research Annual Meeting, ImmunoGen reported pre-clinical data from this program showing CX-2043 elicited potent tumor regression in multiple tumor models, while minimizing on-target toxicities outside the tumor microenvironment. In late 2019, we in-licensed exclusive worldwide development and commercialization rights to CX-2043, for which we are working towards submitting an IND.

Cytokines

Our work with cytokines stems from the fact that systemic toxicity and poor exposure have limited the clinical success of this important and highly potent class of immune modulators. While significant progress has been made in recent years with the approval of interleukin-2, a prototypical immune modulator, for the treatment of metastatic renal cell carcinoma and metastatic melanoma, many efforts to improve its therapeutic window have not been successful. By leveraging our Probody platform, we have recently created a protease-activatable version of interferon alpha-2b, which has shown an improved therapeutic window in preclinical studies.

T-cell engaging Bispecific Antibodies

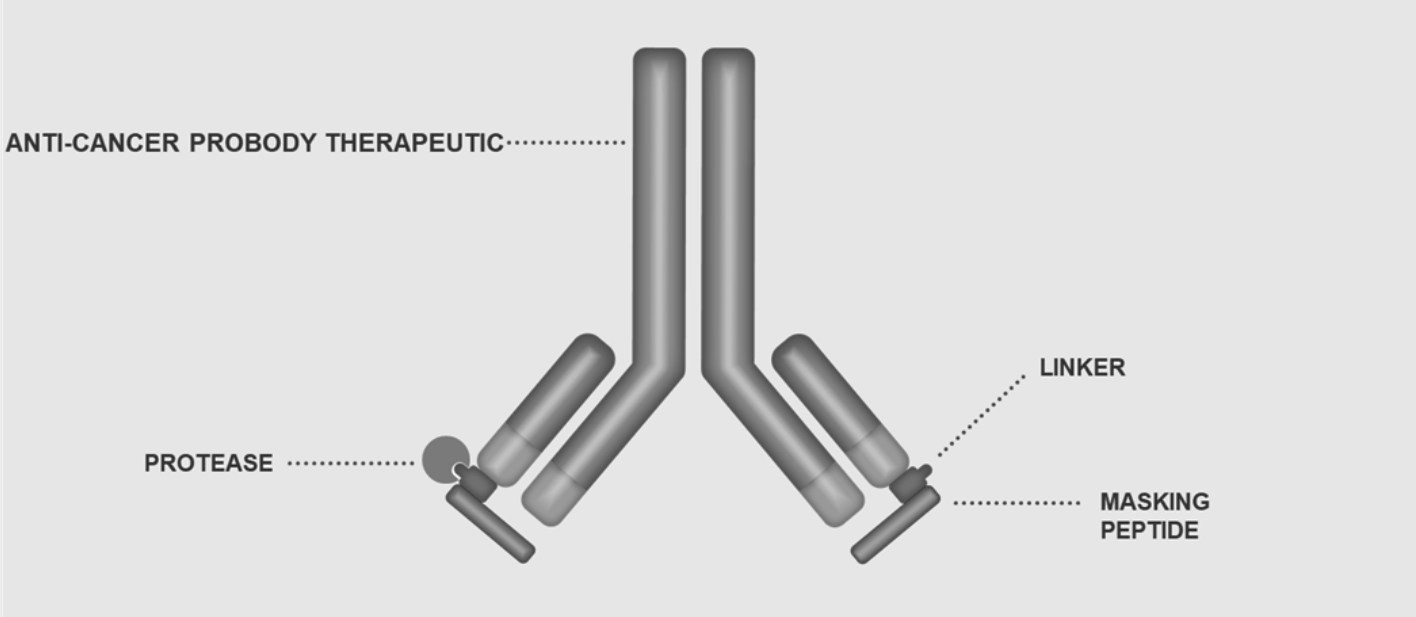
In addition to our work on CX-904, we are advancing a program of T-cell engaging bispecific antibodies, both ourselves, and with our partners, Amgen and Astellas. This program includes novel antibody formats and leverages our deep expertise in masking and extensive and growing knowledge of the tumor protease microenvironment.

The successful development of our product candidates involves a lengthy and expensive process with an uncertain outcome, and preliminary or interim results of our studies may not be predictive of the final results from those trials and the results of earlier studies and trials may not be predictive of future trial results. This is due to the numerous risks and uncertainties associated with the development of product candidates. If our Probody therapeutic technology and product candidates generally prove to be ineffective, unsafe or commercially unviable, it would have a material and adverse effect on our business, financial condition, results of operations and prospects. See "Risk Factors" for a discussion of the risks and uncertainties associated with our product candidates and our research and development projects.

Our Probody Platform

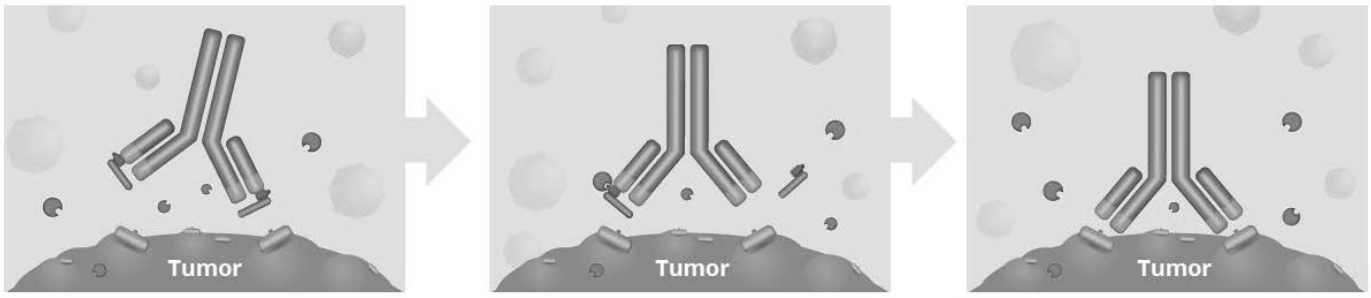
Localization of therapeutic activity of biologics within disease tissue is of increasing interest in the biopharmaceutical industry due to the desire to maximize the activity of biologics while reducing their toxicities. We call our approach to therapeutic localization of biologics our Probody platform. A Probody therapeutic candidate consists of three components: an active anti-cancer biologic, a mask for the biologic, and a protease-cleavable linker which connects the mask to the biologic. The mask is a peptide designed to disguise the active binding site of the biologic to prevent it from binding to the target present on healthy tissue. Probody therapeutic candidates

are produced as a single protein by standard biologic production methodology. The following graphic depicts the three components of a Probody therapeutic candidate:



Depiction of the structure of a Probody therapeutic candidate and a protease interacting with the Probody to cleave the linker and activate the molecule

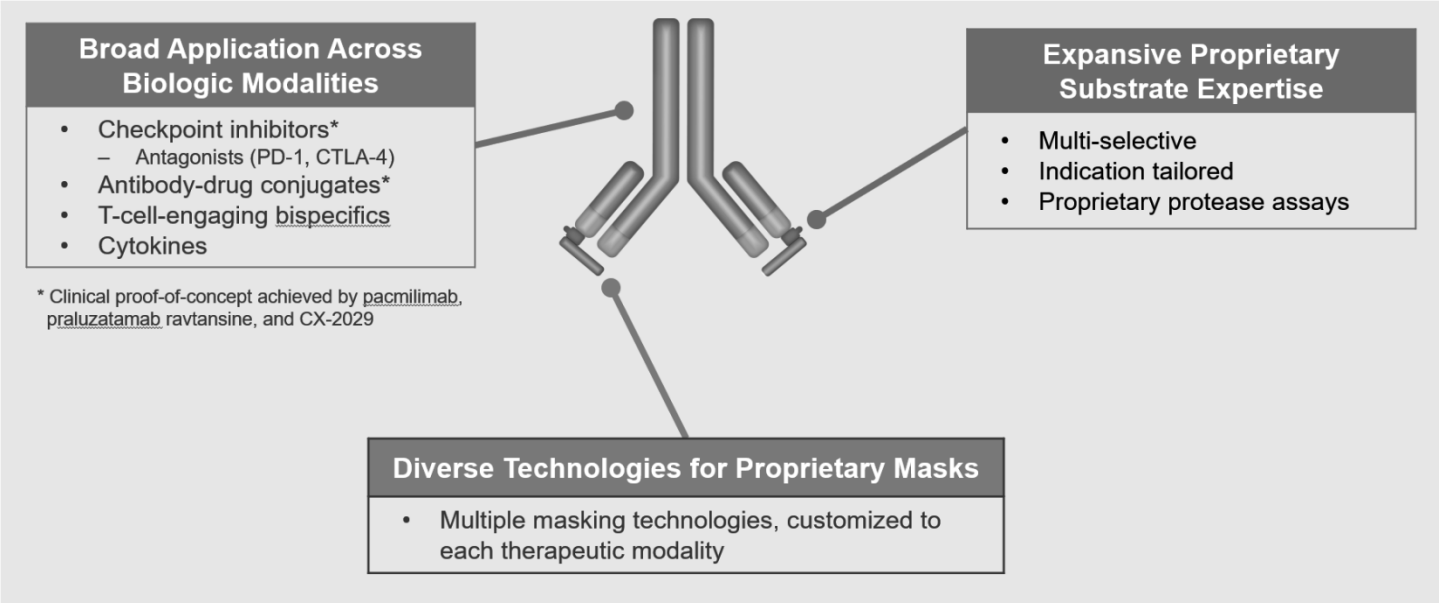
When a Probody therapeutic candidate enters a tumor, it encounters proteases, which are enzymes that cleave proteins and have increased activity in the tumor microenvironment. The proteases in the tumor cleave the linker, releasing the mask and allowing the biologic to bind to the target on the tumor. The following graphic depicts the way a Probody therapeutic candidate is designed to be activated by proteases:



Depiction of how a Probody therapeutic is designed to enter the tumor microenvironment (left), be activated by protease cleavage to remove the mask (middle), thereby enabling the released biologic to bind to the tumor target (right)

Proteases play an essential role in many aspects of normal physiology, such as digestion of food in the gastrointestinal tract, wound healing and metabolic function. However, uncontrolled protease activity can lead to destruction of essential proteins and tissues. Therefore, proteases are normally very tightly regulated by multiple mechanisms, with only small amounts of extracellular protease activity being detectable in healthy tissues. In contrast, it has been well documented that proteases are not only present, but also activated, in virtually all types of tumors, playing a key role in tumor growth, invasion and metastasis. Probody therapeutics are designed to be activated in this protease-rich tumor microenvironment, but not in healthy tissue where proteases are under tight control. Consequently, we believe that toxicities that arise from the binding of a biologic therapeutic to a target in healthy tissues can be reduced, while biological activity against the tumor where it is desired can be preserved. We and our partners have demonstrated the potential of our Probody platform across multiple modalities, including ADCs, cancer immunotherapy, TCBs, and cytokines.

Key Advantages of Our Probody Platform



CytomX's leadership in conditional activation is built on a decade-long expertise in tumor biology and its customizable Probody platform

We believe that our Probody platform provides the following key advantages:

- ***A novel biologic therapeutic class enabled by our proprietary platform.*** By pioneering a novel class of conditionally activated biologic candidates, we are a leader in the field and have established conditional activation as a strategic area of biologics research and development. Our technology platform is supported by more than a decade of research and a strong intellectual property portfolio comprising over 550 issued and pending patents. More than 400 patients with diverse tumor types have been treated with our Probody therapeutic candidates in multiple clinical studies, providing clinical proof of concept and a deep knowledge base for translational advancement and optimization of our drug candidates and platform.
- ***A versatile technology for improvement of therapeutic window.*** By engineering our therapeutics to selectively activate in the tumor microenvironment, our Probody product candidates have the potential to improve safety and tolerability. We are applying our technology to some of the biggest challenges in oncology biologics research and development today. Namely, the validation of potential new targets for ADCs, opening solid tumor opportunities for TCBs, and increasing the therapeutic window for immune modulators such as cytokines and CPIs.
- ***Ability to combine more effectively with other therapies.*** We believe the therapeutic window and tumor specificity of our drug candidates have the potential to reduce the dose-limiting toxicities observed in combination therapies and thus enable new combinations with other cancer therapies that are difficult or impossible to use. For example, our partner, Bristol Myers Squibb, reported at ASCO 2020 that BMS-986249, our Probody version of the anti-CTLA4 therapeutic, ipilimumab, was generally well tolerated at high doses ranging from 240 mg to 2400 mg (approximately 3 to 30 mg/kg of ipilimumab), either as a single agent or in combination with nivolumab. The approved doses of ipilimumab commonly used today are 1 mg/kg and 3 mg/kg.
- ***Molecular tunability and applicability across many targets.*** Our proprietary masking technologies, leveraging affinity-based and steric approaches, allow for unique customization of large drug candidate pools from which high potential clinical candidates are selected. Our technology has the potential to address many different molecular targets expressed by a wide range of tumor types, including targets that are difficult to address due to their widespread expression on healthy cells. CD166 is a prime example of such target, for which we have developed praluzatamab ravtansine, a conditionally activated ADC that is currently in a Phase 2 study in breast cancer.
- ***Deep knowledge of the tumor protease microenvironment.*** Our extensive protease biology expertise, driven by state-of-the-art experimental and computational methods, allows us to employ multiple approaches to generate novel targeted, multi-selective, and potentially indication-tailored protease-cleavable substrates.

Our Collaborations

We believe that the Probody platform has broad applicability across many cancer types, biological targets and antibody modalities. We have leveraged strategic partnering to (a) extend the reach of our therapeutic opportunity, and (b) bring in significant non-dilutive capital into the Company. Since 2013, we have entered into collaborations with AbbVie, Amgen, Astellas, Bristol Myers Squibb and ImmunoGen, among others, to enable development of certain Probody therapeutics. In constructing each of these collaborations, our primary objectives were to collaborate with leading biopharmaceutical players to realize the potential of Probody therapeutics; gain meaningful near-term funding and/or technology access to enable advancement of our wholly-owned Probody therapeutics pipeline; broaden the number of Probody therapeutics that ultimately reach the clinic; and retain significant milestones, royalties, and in some cases product rights, for their long-term potential.

AbbVie Ireland Unlimited Company

In April 2016, we entered into two agreements with AbbVie, a CD71 Co-Development and Licensing Agreement (the "CD71 Agreement") and the Discovery Agreement (the Discovery Agreement, together with the CD71 Agreement are collectively referred to as the "AbbVie Agreements"). Under the terms of the CD71 Agreement, we and AbbVie are co-developing CX-2029, a conditionally activated antibody-drug conjugate ("ADC") against CD71, and we are responsible for pre-clinical and early clinical development. AbbVie will be responsible for later development and commercialization, with global late-stage development costs shared between the two companies. We will assume 35% of the net profits or net losses related to later development unless we opt-out. If we opt-out from participation of co-development of CX-2029, AbbVie will have sole right and responsibility for the further development, manufacturing and commercialization of CX-2029.

Under the CD71 Agreement, we received an upfront payment of $20.0 million in April 2016, and a milestone payment of $40.0 million in May 2020 for completion of the dose-escalation phase of the ongoing Phase 1/2 study. We are currently eligible to receive up to $430.0 million in development, regulatory and commercial milestone payments and royalties on ex-US sales in the high teens to low twenties if we participate in the co-development of CX-2029 subject to a reduction in such royalties if we opt-out from the co-development of the CD71 conditionally activated ADC. Our share of later stage co-development costs for CX-2029 is capped, provided that AbbVie may offset our co-development cost above the capped amounts from future payments such as milestone payments and royalties.

Under the terms of the Discovery Agreement, AbbVie received exclusive worldwide rights to develop and commercialize conditionally activated ADCs against up to two targets, one of which was selected in March 2017 and the second of which was selected in July 2019. We shall perform research services to discover the Probody therapeutics and create conditionally activated ADCs for the nominated collaboration targets. From that point, AbbVie shall have sole right and responsibility for development and commercialization of products comprising or containing such conditionally activated ADCs ("Discovery Licensed Products").

Under the Discovery Agreement, we received an upfront payment of $10.0 million in April 2016 and we received an additional upfront payment of $10.0 million in July 2019 upon the selection by AbbVie of the second target and the satisfaction of certain performance conditions under the CD71 Agreement. We are also eligible to receive up to $265.0 million for each target in development, regulatory and commercial milestone payments as well as royalties in the high single-digits to low teens from commercial sales of any resulting conditionally activated ADCs.

Amgen, Inc.

In September 2017, we entered into a Collaboration and License Agreement (the "Amgen Agreement") with Amgen. Pursuant to the Amgen Agreement, we received an upfront payment of $40.0 million in October 2017. Concurrent with the entry into the Amgen Agreement, Amgen purchased 1,156,069 shares of our common stock for $20.0 million.

Under the terms of the Amgen Agreement, we and Amgen are co-developing a conditionally activated T-cell engaging bispecific therapeutic targeting EGFR ("EGFR Products"). We are responsible for early-stage development of EGFR Products and all related costs (up to certain pre-set limits based on clinical study size). Amgen will be responsible for late-stage development, commercialization, and all related costs of EGFR Products. Following early-stage development, we will have the right to elect to participate financially in the global co-development of EGFR Products with Amgen, during which we would bear certain of the worldwide development costs for EGFR Products and Amgen would bear the rest of such costs (the "EGFR Co-Development Option"). If we exercise our EGFR Co-Development Option, we will share in somewhat less than 50% of the profit and losses from sales of such EGFR Products in the U.S., subject to certain caps, offsets, and deferrals. If we choose not to exercise our EGFR Co-Development Option, we will not bear any costs of later stage development. We are eligible to receive up to $460.0 million in development, regulatory, and commercial milestone payments for EGFR Products, and royalties in the low-double digit to mid-teen

percentage of worldwide commercial sales, provided that if we exercise our EGFR Co-Development option, we shall only receive royalties in the low-double digit to mid-teen percentage of commercial sales outside of the United States.

In October 2021, we and Amgen executed an amendment to the Amgen Agreement primarily to (1) extend the target selection date for Amgen to select its additional targets for research and development, and (2) reduce the total number of milestone events and increase the total amount of milestone payments for EGFR Products.

Amgen also has the right to select a total of up to three targets, including the two additional targets discussed below. We and Amgen will collaborate in the research and development of conditionally activated T-cell engaging bispecifics products directed against such targets. Amgen has selected one such target (the "Amgen Other Product"). If Amgen exercises its option within a specified period of time, it can select two such additional targets (the "Amgen Option Products" and, together with the Amgen Other Product, the "Amgen Products"). Except with respect to preclinical activities to be conducted by us, Amgen will be responsible, at its expense, for the development, manufacture, and commercialization of all Amgen Products. If Amgen exercises all of its options and advances all three of the Amgen Products, we are eligible to receive up to $950.0 million in upfront, development, regulatory, and commercial milestones and tiered high single-digit to low-teen percentage royalties.

We have the option to select, from programs specified in the Amgen Agreement, an existing pre-clinical stage T-cell engaging bispecific product from the Amgen pre-clinical pipeline. We will be responsible, at our expense, for converting this program to a conditionally activated T-cell engaging bispecific product, and thereafter, be responsible for development, manufacturing, and commercialization of the product ("CytomX Product"). Amgen is eligible to receive up to $203.0 million in development, regulatory, and commercial milestone payments for the CytomX Product, and tiered mid-single digit to low double-digit percentage royalties.

Astellas Pharma Inc

In March 2020, we entered into a Collaboration and License Agreement (the "Astellas Agreement") with Astellas, pursuant to which we and Astellas will collaborate on the research, development and commercialization of T-cell engaging bispecific antibody products ("Products") directed to CD3 and selected tumor antigen targets using our Probody® platform and other proprietary technology. Under the Astellas Agreement, we granted Astellas an exclusive, worldwide, royalty-bearing license to develop and commercialize Products in all fields. Astellas may select up to four targets to develop, with an option to expand to six targets. We will lead preclinical research and discovery activities up to clinical candidate selection for Products directed against up to four targets. Astellas will lead preclinical and clinical development of and regulatory approval for all Products. Astellas will be responsible for commercializing each Product, provided that we will have the option to elect to co-commercialize certain Products with Astellas in the United States, subject to the terms of a separate commercialization agreement to be entered into between us and Astellas.

Under the terms of the Astellas Agreement, we received an upfront payment of $80 million, and Astellas will be responsible for funding the cost of preclinical research and discovery activities of both parties for all Products and for funding the cost of development and commercialization of all Products worldwide. If Astellas exercises its option to expand to six targets, we will be eligible to receive future preclinical, clinical and commercial milestones of approximately $2.5 billion. Astellas will pay us tiered royalties on global net sales of Products from high single-digit to mid-teens percentages, subject to certain reductions. Astellas' royalty obligations continue with respect to each country and each Product until the later of (i) the date on which such Product is no longer covered by certain intellectual property rights, (ii) the 10th anniversary of the first commercial sale of such product in such country, and (iii) the loss of regulatory exclusivity for such Product in such country.

In addition, for a specified number of targets, at a pre-specified time prior to the initiation of the first pivotal study of a Product directed against such target, we will have an option to elect to co-fund certain subsequently initiated clinical trials for such Product. If we opt in, we would be responsible for a pre-determined portion of the costs of such trials, subject to specified caps, deferrals and offsets. We would then have the option to elect to co-commercialize such Products in the United States. For any such Products, in lieu of royalties in the United States, we will receive less than 40% of the profits for such Products in the United States and tiered low double-digit to mid-teens percentage royalties on net sales of such Products outside of the United States, subject to certain reductions.

Bristol Myers Squibb Company

In May 2014, we and Bristol Myers Squibb entered into a Collaboration and License Agreement (the "BMS Agreement") to discover and develop compounds for use in human therapeutics aimed at multiple immuno-oncology targets using our Probody therapeutic technology.

Under the terms of the BMS Agreement, we granted Bristol Myers Squibb exclusive worldwide rights to develop and commercialize Probody therapeutics for up to four oncology targets, two of which were selected upon the execution of the BMS Agreement. Pursuant to the BMS Agreement, we received an upfront payment of $50.0 million and were initially entitled to receive contingent

payments of up to an aggregate of $1,217.0 million in development, regulatory and commercial milestone payments, which can be reduced by any such payments received or by any termination of targets being pursued. We are entitled to royalty payments in the mid-single-digit to low double-digits percentage from potential future sales. We also receive research and development service fees. Bristol Myers Squibb has terminated certain targets from the BMS Agreement, as described below.

In January 2016, Bristol Myers Squibb selected the third target pursuant to the BMS Agreement and paid us $10.0 million. In December 2016, Bristol Myers Squibb selected the fourth and its final target pursuant to the BMS Agreement and paid us $15.0 million. In December 2016, Bristol Myers Squibb selected BMS-986249, a CTLA-4 Probody therapeutic, as a clinical candidate pursuant to the BMS Agreement, which triggered a $2.0 million pre-clinical milestone payment to us. In November 2017, Bristol Myers Squibb received acceptance of the IND for BMS-986249 from the FDA, which triggered a $10.0 million milestone payment to us. Bristol Myers Squibb recently advanced BMS-986249 into a randomized Phase 2 cohort expansion in patients with metastatic melanoma in combination with the PD-1 inhibitor nivolumab as part of the larger clinical trial, triggering, in February 2020, a $10.0 million milestone payment from Bristol Myers Squibb to us. This study has been modified to include three additional single-arm cohorts: advanced hepatocellular carcinoma, metastatic castration-resistant prostate cancer, and unresectable locally advanced or metastatic TNBC.

In September 2019, Bristol Myers Squibb initiated the dose escalation phase of a Phase 1/2a clinical trial of a second anti-CTLA-4-directed therapeutic, BMS-986288, based on a modified version of ipilimumab, administered as monotherapy and in combination with nivolumab in patients with selected advanced solid tumors.

In March 2017, we and Bristol Myers Squibb entered into Amendment Number 1 to Extend Collaboration and License Agreement ("Amendment 1"). Amendment 1 granted Bristol Myers Squibb exclusive worldwide rights to develop and commercialize Probody therapeutics for up to six additional oncology targets and two non-oncology targets. Under the terms of Amendment 1, we continued to collaborate with Bristol Myers Squibb to discover and conduct preclinical development of Probody therapeutics against targets selected by Bristol Myers Squibb. Pursuant to Amendment 1, we received an upfront payment of $200.0 million and were eligible to receive contingent payments for development, regulatory and sales milestones. We were also entitled to tiered mid-single to low double-digit percentage of royalties from potential future sales.

In February 2021, we and Bristol Myers Squibb entered into Amendment Number 2 to amend the Collaboration and License Agreement ("Amendment 2"), as amended by Amendment 1. Subsequent to Amendment 2, Bristol Myers Squibb has the exclusive worldwide rights to develop and commercialize Probody therapeutics for up to five oncology targets. Under the terms of Amendment 2, the period for target selection has been extended and we will continue to collaborate with Bristol Myers Squibb to discover and conduct preclinical development of Probody therapeutics against targets selected by Bristol Myers Squibb. Pursuant to Amendment 2, we are eligible to receive contingent payments for development, regulatory and sales milestones of up to an aggregate of $1,779.0 million. We are also entitled to tiered mid-single- to low double-digit percentage of royalties from potential future sales.

ImmunoGen, Inc.

In January 2014, CytomX and ImmunoGen entered into the Research Collaboration Agreement (the "ImmunoGen Research Agreement"). The ImmunoGen Research Agreement provides us with the right to use ImmunoGen's ADC technology in combination with our Probody therapeutic technology to create a conditionally activated ADC directed at one specified target under a research license, and to subsequently obtain an exclusive, worldwide development and commercialization license to use ImmunoGen's ADC technology to develop and commercialize such conditionally activated ADCs. Under the agreement, we provided ImmunoGen with the rights to our Probody therapeutic technology to create conditionally activated ADCs directed at two targets under the research license and to subsequently obtain exclusive, worldwide development and commercialization licenses to develop and commercialize such conditionally activated ADCs. In February 2016, we exercised our option to obtain a development and commercialization license for praluzatamab ravtansine (CX-2009) pursuant to the terms of the ImmunoGen Research Agreement (the "CX-2009 License"). In February 2017, ImmunoGen exercised its option to obtain a development and commercialization license for the first of its two targets. ImmunoGen discontinued this program in July 2017 and substitution rights for this program terminated in February 2017. ImmunoGen exercised its second option to obtain a development and commercialization license pursuant to the ImmunoGen Research Agreement (the "ImmunoGen 2017 License") for a target, EpCAM, in December 2017. At the end of 2019, as a result of a strategic restructuring by ImmunoGen and its decision to out-license certain programs, we obtained a worldwide, exclusive, sublicensable license to the EpCAM conditionally activated ADC program from ImmunoGen (the "ImmunoGen 2019 License") and the ImmunoGen 2017 license ended.

Under the terms of the ImmunoGen Research Agreement, both we and ImmunoGen were required to perform research activities on behalf of the other party for no monetary consideration. Each party was solely responsible for the development, manufacturing and commercialization of any products resulting from the exclusive development and commercialization license obtained by such party under the agreement. In consideration for the praluzatamab ravtansine License, ImmunoGen is entitled to receive up to $60.0 million

in development and regulatory milestone payments, up to $100.0 million in sales milestone payments and royalties in the mid to high single-digits percentage on the commercial sales of any resulting product. In August 2017, we made a milestone payment of $1.0 million to ImmunoGen for the first patient dosing with praluzatamab ravtansine and in February 2020, we triggered a $3.0 million milestone payment to ImmunoGen for the first dosing of a patient in the praluzatamab ravtansine Phase 2 clinical trial. Under the ImmunoGen 2019 License, we gained rights to the EpCAM conditionally activated ADC program and, in return, we made an upfront payment, and we will pay certain clinical development, approval and commercialization milestone payments if achieved and royalties on product sales.

Manufacturing

Our Probody therapeutic candidates are designed to be produced as fully recombinant antibody prodrugs. Our Probody therapeutic candidates are also designed to maintain the manufacturability benefits of antibodies and leverage well established technologies used for antibody production. We conduct cell line development and process development both in-house and in collaboration with contract development and manufacturing organizations ("CMO"). CMOs are responsible for manufacturing of drug substance and clinical drug product materials.

We utilize well established production steps typically part of a platform manufacturing process for antibodies. The CMOs we have selected have a strong track record in manufacturing therapeutic biologics, including antibodies. Similarly, for our conditionally activated ADC projects we have selected CMOs with strong expertise in clinical/commercial drug conjugate manufacturing and with capabilities for toxin conjugation and fill-finish. Furthermore, our two lead conditionally activated ADC programs incorporate toxin payloads that have an established clinical and regulatory history.

To date, we have generally been able to successfully manufacture praluzatamab ravtansine (CX-2009), CX-2029, and pacmilimab (CX-072) for our ongoing early-stage clinical trials with contract manufacturers. Our partner, Bristol Myers Squibb, has also been successful in independently manufacturing drug product for BMS-986249 and BMS-986288. Furthermore, in order to conduct later-stage clinical trials of our product candidates, including praluzatamab ravtansine, CX-2029, and pacmilimab, and eventually, if approved, commercial products, we will need to manufacture them in larger quantities. We, or any manufacturing partners, may be unable to successfully increase the manufacturing scale and capacity for any of our product candidates in a timely or cost-effective manner, or at all. For example, we are currently working with our CMOs to change our manufacturing processes and formulations, scaling up for large drug manufacturing capability for praluzatamab ravtansine and pacmilimab and increasing the term of stability for pacmilimab drug product for late-stage clinical trials and commercialization. However, we may have to start late-stage trials with our early clinical trial drug product and switch to the late-stage or commercial drug product mid trial. In such event, the FDA will require us to complete bridging studies to compare the earlier stage material with the late-stage or commercial material to assure comparability between the earlier trial material and the late-stage or commercial material. Changing the formulation and scale up process is a complicated and difficult task. While we believe we can complete the process successfully, there can be no assurances that the changes we make to the drug product and manufacturing process will be successful or completed in a timely manner or that the FDA will not require additional development steps or studies from those we believe are necessary. If we are unable scale up our manufacturing capabilities with respect to praluzatamab ravtansine, pacmilimab or any of our other product candidates, increase the life of drug stability of pacmilimab or such other product candidates, or successfully complete the FDA's bridging requirements, we may not be able to successfully obtain FDA approval and commercialize pacmilimab or such other product candidates in a timely manner or at all.

The supply chain for the manufacturing of our product candidates is complicated and can involve many parties. We do not own manufacturing facilities for producing such supplies and rely on third-party contract manufacturers to manufacture our clinical trial and preclinical study product supplies. Our clinical trial manufacturing contractors and suppliers are our sole source for their respective manufacturing and supplies. Failure of any of these contractors could affect our ability to have clinical trial material available when needed. This could result in a substantial delay of our clinical trials. For example, for each of praluzatamab ravtansine, CX-2029, pacmilimab and CX-904, our manufacturing supply chain includes several contract manufacturers, and failure by any of these manufacturers could result in interruptions of our clinical studies. We do not have any long-term contracts and we do not currently have an alternative to any of our third-party contract manufacturers. Consequently, 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 any of our third-party contract manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. In addition, we may encounter issues with transferring technology to a new third-party manufacturer, and we may encounter regulatory delays if we need to move the manufacturing of our products from one third-party manufacturer to another. For example, we were dependent on ImmunoGen under our collaboration for certain steps in the manufacturing of clinical quantities of praluzatamab ravtansine. At the end of 2018, ImmunoGen closed their clinical manufacturing facility in Norwood, Massachusetts which provided clinical manufacturing support for the praluzatamab ravtansine program. We have completed the transfer of the drug substance manufacturing process from ImmunoGen to a contract manufacturer, where we have an existing relationship and with expertise in the manufacture of antibody

drug conjugates at a clinical and commercial scale. While the manufacturing transfer process has been completed, there can be no assurance that we will not experience a disruption in the supply of praluzatamab ravtansine as a result of such transfer or that we will not experience any other disruption in the manufacturing of praluzatamab ravtansine.

In-Licenses

License from UCSB

In August 2010, we entered into an agreement with UCSB, that grants us an exclusive license, with the right to sublicense, under the patent rights owned by UCSB covering mask and screening technologies relating to the identification and discovery of pro-protein biologics, including masks and substrates, for the identification of pro-proteins, for use in the fields of therapeutics, in vivo diagnostics, and prophylactics (the "UCSB Agreement"). The UCSB Agreement also grants us an exclusive license, with the right to sublicense, under UCSB's interest in certain patent rights we co-own with UCSB covering Probody antibodies and other pro-proteins in the fields of therapeutics, in vivo diagnostics and prophylactics.

We had no upfront payment obligations under the agreement. In April 2019, we amended the UCSB Agreement and in connection with the amendment, we paid UCSB $1.0 million and issued 150,000 shares of our common stock to UCSB. We are obligated to pay to UCSB royalties on net sales of licensed products in the low single digit percentages, subject to annual minimum amounts as well as certain reductions. We are required to make milestone payments to UCSB on the accomplishment of certain milestones totaling up to $1,075 million for each of the first two indications for each licensed product consisting of a molecule or compound covered by the licensed patent rights. We were also obligated to make a payment to UCSB upon the first occurrence of an IPO or change of control. If the Company sublicenses its rights under the UCSB Agreement, it must pay UCSB a percentage of our total sublicense revenues ranging from the mid-single to mid-teen percentages, which total amount would be first reduced by the aggregate amount of certain research and development related expenses incurred by the Company and other permitted deductions.

Licenses from ImmunoGen

In February 2016, we exercised our option to obtain a worldwide, exclusive, sublicensable license from ImmunoGen for development and commercialization of products directed against the target selected by us under our research collaboration agreement with ImmunoGen. Additionally, in December 2019, we obtained a worldwide, exclusive, sublicensable license to ImmunoGen's EpCAM conditionally activated ADC program. See the description of the license agreements set forth under the caption "Our Collaborations—ImmunoGen, Inc." in this Item 1 of this Annual Report on Form 10-K.

Competition

CytomX is pioneering a new class of antibody therapeutics – the Probody therapeutic platform. The biotechnology and biopharmaceutical industries, including the ADC and immuno-oncology subsectors, are characterized by rapid evolution of technologies, fierce competition and strong defense of intellectual property. Any product candidates that we successfully develop and commercialize will have to compete with existing therapies and new therapies that may become available in the future. While we believe that our proprietary Probody platform and scientific expertise in the field of biologics and immuno-oncology provide us with competitive advantages, a wide variety of institutions, including large biopharmaceutical companies, specialty biotechnology companies, academic research departments and public and private research institutions, are actively developing potentially competitive products and technologies. We face substantial competition from biotechnology and biopharmaceutical companies developing biopharmaceutical products, particularly with respect to ADC and immuno-oncology therapeutics, where competition is intense and rapidly evolving. These competitors generally fall within the following categories:

Masking and conditional activation: Several companies, including AbbVie, Adagene, Amgen, Amunix, BioAtla, Halozyme, Harpoon, Pandion Therapeutics, Revitope, Roche, Seagen, Takeda, Werewolf, and Xilio are exploring antibody masking and/or conditional activation strategies, which could compete with our Probody platform.

Antibody-drug conjugates: Several large pharmaceutical companies, such as AbbVie, Daiichi Sankyo, Gilead, Pfizer, Roche, and Takeda are developing ADCs. Two mid-sized companies, ImmunoGen and Seagen are also leaders in this space. In addition, numerous smaller companies have ongoing efforts in the space.

Cancer immunotherapies: Cancer immunotherapy is one of the most competitive and fastest growing segments of the pharmaceutical industry. Almost every large pharmaceutical company is developing cancer immunotherapies, including Amgen, AstraZeneca, Bristol Myers Squibb, Celgene, GlaxoSmithKline, Merck, Novartis, Pfizer, Roche, and Sanofi. In addition, many large and mid-sized biotech companies such as BeiGene, Incyte, Nektar, and Alkermes have ongoing efforts in cancer immunotherapy. Numerous smaller companies are also working in this space.

T-cell engaging bispecifics: Several large pharmaceutics companies, such as Amgen, Novartis, and Roche, have on-going efforts in the field of TCBs. In additional, several mid-sized biotech companies such as MacroGenics and Xencor, as well as numerous smaller companies, including Janux, have ongoing efforts in TCBs.

Many of our competitors, either alone or with strategic partners, have substantially greater financial, technical and human resources than we do. Accordingly, our competitors may be more successful than us in obtaining approval for treatments and achieving widespread market acceptance, rendering our treatments obsolete or non-competitive. Accelerated merger and acquisition activity in the biotechnology and biopharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. These companies also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical study sites and patient registration for clinical studies and acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Our commercial opportunity could be substantially limited in the event that our competitors develop and commercialize products that are more effective, safer, less toxic, more convenient or less expensive than our comparable products. In geographies that are critical to our commercial success, competitors may also obtain regulatory approvals before us, resulting in our competitors building a strong market position in advance of our products' entry. We believe the factors determining the success of our programs will be the efficacy, safety and convenience of our product candidates.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to our business, including seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. Our policy is to seek to protect our proprietary position by, among other methods, pursuing and obtaining patent protection in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements, platforms and product candidates that are important to the development and implementation of our business. Our patent portfolio is intended to cover, but is not limited to, our technology platforms, our product candidates and components thereof, their methods of use and processes for their manufacture, our proprietary reagents and assays, and any other inventions that are commercially important to our business. We also rely on trade secret protection of our confidential information and know-how relating to our proprietary technology, platforms and product candidates, continuing innovation, and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in our Probody platform and product candidates. We expect to rely on data exclusivity, market exclusivity, patent term adjustment and patent term extensions when available. Our commercial success may depend in part on our ability to obtain and maintain patent and other proprietary protection for our technology, inventions, and improvements; to preserve the confidentiality of our trade secrets; to maintain our licenses to use intellectual property owned or controlled by third parties; to defend and enforce our proprietary rights, including our patents; to defend against and challenge the assertion by third parties of their purported intellectual property rights; and to operate without the unauthorized infringement of valid and enforceable patents and other proprietary rights of third parties.

We believe that we have a strong global intellectual property position and substantial know-how and trade secrets relating to our Probody therapeutic technology, platform and product candidates. Our patent portfolio as of January 6, 2022 contains at least 160 granted patents (some of which are co-owned with a third party) and at least 390 pending patent applications (some of which are co-owned with a third party). We have exclusively licensed UCSB's interest in the co-owned patent family covering Probody and other pro-protein technology in the fields of therapeutics, *in vivo* diagnostics and prophylactics.

These patents and patent applications include claims directed to:

- Probody platform and PDC platform;
- Other pro-protein platforms;
- Probody conjugates and conjugation methods to produce PDCs;
- Bispecific and other multispecific Probody therapeutics, including T-cell-recruiting bispecific Probody therapeutics;
- Protease-cleavable linkers, e.g., serine protease- and/or MMP-cleavable linkers;
- Improved display systems for peptide display, e.g., to identify masks, substrates, and other proteins;
- Cancer immunotherapy Probody therapeutics, e.g., PD-L1, PD-1, and CTLA-4 Probody therapeutics, as well as related novel antibodies and combination therapies;
- Probody drug conjugates, e.g., CD-166, CD71 (transferrin receptor), CD49c (integrin alpha 3), and CD147 PDCs, as well as related Probody therapeutics, novel antibodies and ADCs;

- Probody therapeutics to other targets, e.g., EGFR, Jagged, and IL6R Probody therapeutics, as well as related PDCs, novel antibodies and ADCs;
- Antibodies that bind Probody therapeutics, e.g., anti-mask and anti-Probody antibodies;
- Antibodies that bind key targets;
- Antibodies that bind the active site of uPA protease;
- Compositions and methods to discriminate between intact Probody therapeutics and activated versions thereof, as well as other translation assays;
- Methods to produce intact Probody therapeutics; and
- Methods to use any of the above-referenced compounds and compositions.

In addition, we have exclusively licensed a patent portfolio of patent families from UCSB patents and patent applications that cover compositions and methods related to screening for and identification of masks and protease-cleavable linkers that we have incorporated into our Probody therapeutics and may incorporate into future Probody therapeutics.

As for the Probody platform, product candidates and processes we develop and commercialize, in the normal course of business, we intend to pursue, where appropriate, patent protection or trade secret protection relating to compositions, methods of manufacture, assay methods, methods of use, treatment of indications, dosing and formulations. We may also pursue patent protection with respect to product development processes and technology.

We continually assess and refine our intellectual property strategy as we develop new platform technologies and product candidates. To that end, we are prepared to file additional patent applications if our intellectual property strategy requires such filings, or where we seek to adapt to competition or seize business opportunities. Further, we are prepared to file patent applications, as we consider appropriate under the circumstances, relating to the new technologies that we develop. In addition to filing and prosecuting patent applications in the United States, we often file counterpart patent applications in the European Union and in additional countries where we believe such foreign filing is likely to be beneficial.

Our currently issued patents will likely expire on dates ranging from 2028 to 2037, unless we receive patent term extension or adjustment as might be available under applicable law. If patents are issued on our pending patent applications, the resulting patents are projected to expire on dates ranging from 2028 to 2041, unless we receive patent term extension or adjustment. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent.

All of our patents and patent applications are subject to risks and uncertainties under U.S. and foreign law. We also rely on trademark registration to protect our trademarks. For a more comprehensive discussion of risks related to our proprietary technology, inventions, improvements, platforms and product candidates, please see the section entitled “Risk Factors—Risks Related to Intellectual Property.”

We also rely on trade secret protection for our confidential and proprietary information. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. In the case of employees, the agreements provide that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property. In many cases our confidentiality and other agreements with consultants, outside scientific collaborators, sponsored researchers and other advisors require them to assign or grant us licenses to inventions they invent as a result of the work or services they render under such agreements or grant us an option to negotiate a license to use such inventions.

Government Regulation and Product Approval

Governmental authorities in the U.S., at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, packaging, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing. Our product candidates are subject to regulation in the U.S. as biologics, which must be approved by the FDA through the BLA process before they may be legally marketed in the U.S. and will be subject to similar requirements in other countries prior to marketing in those countries. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Government Regulation

In the U.S., the FDA regulates biologics under the Federal Food, Drug, and Cosmetic Act ("FDCA") and the Public Health Service Act ("PHSA"), and their respective implementing regulations.

BLA Approval Process

The process required by the FDA before a biologic may be marketed in the U.S. generally involves the following:

- completion of nonclinical laboratory tests, animal studies and formulation studies conducted according to good laboratory practices ("GLPs"), and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an institutional review board ("IRB") or ethics committee at each clinical site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials according to good clinical practices ("GCPs"), to establish the safety, purity and potency of the product candidate for its intended use;
- preparation and submission to the FDA of a BLA after completion of all pivotal trials;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the product candidate is produced to assess compliance with current good manufacturing practices ("cGMPs") to assure that the facilities, methods and controls are adequate to preserve the product candidate's continued safety, purity and potency, and of selected clinical investigation sites to assess compliance with GCPs; and
- FDA review and approval of the BLA to permit commercial marketing of the product for its particular labeled uses in the United States.

Preclinical and Clinical Studies

Once a biologic product candidate is identified for development, it enters the preclinical or nonclinical testing stage. Nonclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the nonclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some nonclinical testing may continue even after the IND is submitted. In addition to including the results of the nonclinical studies, the IND will also include a protocol detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the first phase lends itself to an efficacy evaluation. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the IND on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin. A clinical hold may occur at any time during the life of an IND and may affect one or more specific studies or all studies conducted under the IND.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with GCPs. They must be conducted under protocols detailing the objectives of the trial, dosing procedures, research subject selection and exclusion criteria and the safety and effectiveness criteria to be evaluated. Each protocol, and any subsequent material amendment to the protocol, must be submitted to the FDA as part of the IND. While the IND is active and before approval, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the same or similar drugs, findings from animal or in vitro testing suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

Furthermore, an independent IRB for each site proposing to conduct each clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site and must monitor the study until completion. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. Depending on its charter, this group may determine whether a trial may move forward at designated check points based on access to certain data from the trial. The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries.

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

- Phase 1—The product candidate is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and elimination. In the case of some therapeutic candidates for severe or life-threatening diseases, such as cancer, especially when the product candidate may be inherently too toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- Phase 2—The product candidate is administered to a limited patient population with the specified disease or condition to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- Phase 3—The product candidate is administered to an expanded patient population to further evaluate dosage, clinical efficacy and safety, generally at geographically dispersed clinical study sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide an adequate basis for product approval.

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

During the development of a new biologic product candidate, sponsors are given opportunities to meet with the FDA at certain points; specifically, prior to the submission of an IND, at the end of Phase 2 and before a BLA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date and for the FDA to provide advice on the next phase of development. Sponsors typically use the meeting at the end of Phase 2 to discuss their Phase 2 clinical results and present their plans for the pivotal Phase 3 clinical trial that they believe will support the approval of the new therapeutic. If a Phase 3 clinical trial is the subject of discussion at the end of Phase 2 meeting with the FDA, a sponsor may be able to request a Special Protocol Assessment ("SPA"), the purpose of which is to reach agreement with the FDA on the Phase 3 clinical trial protocol design and analysis that will form the primary basis of an efficacy claim. If a written agreement is reached, it will be binding on the FDA and may not be changed by the sponsor or the FDA after the trial begins except with the written agreement of the sponsor and the FDA or if the FDA determines that a substantial scientific issue essential to determining the safety or efficacy of the product candidate was identified after the testing began.

Concurrent with clinical trials, sponsors usually complete additional animal safety studies, develop additional information about the chemistry and physical characteristics of the product candidate and finalize a process for manufacturing commercial quantities of the product candidate in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and the manufacturer must develop methods for testing the safety, purity and potency of the product candidate. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the biologic product candidate does not undergo unacceptable deterioration over its shelf life.

Submission of a BLA to the FDA

The results of product development, nonclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests and other control mechanisms, proposed labeling and other relevant information are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications.

Under the Prescription Drug User Fee Act ("PDUFA") as amended, each BLA must be accompanied by a significant user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for marketed products. Fee waivers or reductions are available in certain circumstances, such as where a waiver is necessary to protect the public health, where the fee would present a significant barrier to innovation, or where the applicant is a small business submitting its first human therapeutic application for review.

Within 60 days following submission of the application, the FDA reviews a BLA to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews a BLA to determine, among other things, whether the proposed product is safe, pure and potent for its intended use, and whether the facility in which it is being manufactured, processed, packaged, or held meets standards designed to assure the product's continued safety, purity and potency in accordance with cGMP. The FDA may refer applications for novel products or products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with GCP requirements.

After the FDA evaluates the BLA 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 describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

Even if a product receives regulatory approval, the approval may be significantly limited to specific indications and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling.

As a condition of BLA approval, the FDA may require a Risk Evaluation and Mitigation Strategy ("REMS") to ensure that the benefits of the drug outweigh its risks. If the FDA determines a REMS is necessary prior to or during review of the application, the sponsor must submit a REMS as part of its application, and the FDA will not approve a BLA without a REMS, if required. A REMS program may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the product's risks, or other elements to assure safe use, such as limitations on who may prescribe or dispense the drug, dispensing only under certain circumstances, special monitoring and the use of patient registries. In addition, all REMS programs must include a timetable to periodically assess the strategy following implementation.

Further, product approval may require substantial post-approval testing and surveillance to monitor the product's safety and efficacy, and the FDA has the authority to prevent or limit further marketing of a product based on the results of these post-marketing programs. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing. Moreover, changes to the conditions established in an approved application, including changes in indications, labeling or manufacturing processes or facilities may require submission and FDA approval of a new supplement before the changes can be implemented. A supplement for a new indication typically requires clinical data, and the FDA uses similar procedures in reviewing supplements as it does in reviewing original applications.

Companion Diagnostics

Some of our product candidates may require use of an in vitro diagnostic to identify appropriate patient populations. These diagnostics, often referred to as 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, pre-clinical 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, companion diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval ("PMA").

If use of companion diagnostic is essential to safe and effective use of a biologic product, then the FDA generally will require approval or clearance of the diagnostic contemporaneously with the approval of the biologic product. According to FDA guidance, for novel product candidates such as drugs and therapeutic biologics, a companion diagnostic device and its corresponding product candidate should be approved or cleared contemporaneously by FDA for the use indicated in the product labeling. The guidance also explains that a companion diagnostic device used to make treatment decisions in clinical trials of a product candidate generally will be considered an investigational device unless it is employed for an intended use for which the device is already approved or cleared. If used to make critical treatment decisions, such as patient selection, the diagnostic device generally will be considered a significant risk device under the FDA's Investigational Device Exemption ("IDE") regulations. Thus, the sponsor of the diagnostic device will be required to comply with the IDE regulations. According to the guidance, if a diagnostic device and a drug or biologic product candidate are to be studied together to support their respective approvals, both products can be studied in the same investigational study, if the study meets both the requirements of the IDE regulations and the IND regulations. The guidance provides that depending on the details of the study plan and subjects, a sponsor may seek to submit an IND alone, or both an IND and an IDE.

The FDA generally requires companion diagnostics intended to select the patients who will respond to cancer treatment to obtain approval of a PMA for that diagnostic contemporaneously with approval of the therapeutic product. The PMA process, including the gathering of clinical and pre-clinical 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 also subject to an application fee. In addition, PMAs for certain devices must generally include the results from extensive pre-clinical 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, the applicant must demonstrate that the diagnostic produces reproducible results when the same sample is tested multiple times by multiple users at multiple laboratories. In addition, as part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation ("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. 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. 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 United States.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying product candidates.

A product candidate may be eligible for Fast Track designation if it is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product candidate and the specific indication for which it is being studied. The sponsor of a Fast Track product candidate has opportunities for frequent interactions with the review team during product development and, once a BLA is submitted, the product candidate may be eligible for Priority Review. A Fast Track product candidate may also be eligible for Rolling Review, where the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for Breakthrough Therapy designation to expedite its development and review. A product candidate can receive Breakthrough Therapy designation if preliminary clinical evidence indicates that the product candidate may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers.

After a BLA is submitted for a product candidate, including a product candidate with a Fast Track designation and/or Breakthrough Therapy designation, the BLA may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as Priority Review and Accelerated Approval. A BLA is eligible for Priority Review if the product candidate has the potential to provide a significant improvement in the treatment, diagnosis or prevention of a serious disease or condition compared available products. Priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date, compared to ten months under standard review.

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive Accelerated Approval upon a determination that the product candidate has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of Accelerated Approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving Accelerated Approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for Accelerated Approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of the use of our therapeutic candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product candidate's approval date. The patent term restoration period is generally one half of the time between the effective date of an IND and the submission date of a BLA, plus the time between the submission date of a BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved product candidate is eligible for the extension and the application for extension must be made prior to expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restorations of patent term for some of our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of clinical trials and other factors involved in the submission of the relevant BLA.

Biosimilars and Exclusivity

The Affordable Care Act, signed into law in 2010, includes the Biologics Price Competition and Innovation Act ("BPCIA"), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can 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 biologic and the reference biologic 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 biologic.

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 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 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. 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.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant Orphan Drug Designation to therapeutic candidates intended to treat a rare disease or condition, which is generally a disease or condition that affects either (1) fewer than 200,000 individuals in the U.S., or (2) 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 product candidate for this type of disease or condition will be recovered from sales in the U.S. for that product candidate. Orphan drug designation entitles the applicant to incentives, which may include grant funding towards clinical study costs, tax advantages, and waivers of FDA user fees. Orphan Drug Designation must be requested before submitting a BLA. 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.

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

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if a second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition

Pediatric Studies

The Pediatric Research Equity Act ("PREA"), requires a sponsor to conduct pediatric studies for most therapeutic candidates and biologics, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original BLAs and supplements thereto must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must assess the safety and effectiveness of the product candidate for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product

candidate is determined to be safe, pure and potent. The sponsor or FDA may request a deferral of pediatric studies for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the product candidate or biologic is ready for approval for use in adults before pediatric studies are complete or that additional safety or effectiveness data needs to be collected before the pediatric studies begin. The law requires the FDA to send a PREA Non-Compliance letter to sponsors who have failed to submit their pediatric assessments required under PREA, have failed to seek or obtain a deferral or deferral extension or have failed to request approval for a required pediatric formulation. It further requires the FDA to post the PREA Non- Compliance letter and sponsor's response.

Post-Approval Requirements

Once a BLA approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if problems occur after the biologic product reaches the market. Later discovery of previously unknown problems with a product candidate may result in restrictions on the product candidate or even complete withdrawal of the product candidate from the market. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. In addition, the FDA may under some circumstances require testing and surveillance programs to monitor the effect of approved product that have been commercialized, and the FDA under some circumstances has the power to prevent or limit further marketing of a product candidate based on the results of these post-marketing programs.

Biologic manufacturers and other entities involved in the manufacture and distribution of approved therapeutic products are required to register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and some state agencies for compliance with cGMPs and other laws. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes extensive procedural, substantive and record-keeping requirements. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require FDA approval before being implemented. FDA regulations would also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use if our product candidates are approved. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory 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, complete withdrawal of the product from the market or product recalls;
- safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warning or other safety information about the product;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending BLAs or supplements to approved BLAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of drug products. A company can make only those claims relating to safety and efficacy that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labelling.

Regulation Outside of the U.S.

In addition to regulations in the U.S., we will be subject to regulations of other jurisdictions governing any clinical trials and commercial sales and distribution of our therapeutic candidates. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of countries outside of the U.S. before we can commence clinical trials in such countries and approval of the regulators of such countries or economic areas, such as the European Union, before we may market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval.

Under European Union regulatory systems, a company can consider applying for marketing authorization in several European Union member states by submitting its marketing authorization application(s) under a centralized, decentralized or mutual recognition procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. The centralized procedure is compulsory for medicines derived from biotechnology, orphan medicinal products, or those medicines with an active substance not authorized in the European Union on or before May 20, 2004 intended to treat acquired immune deficiency syndrome ("AIDS"), cancer, neurodegenerative disorders or diabetes and optional for those medicines containing a new active substance not authorized in the European Union on or before May 20, 2004, medicines which are highly innovative, or medicines to which the granting of a marketing authorization under the centralized procedure would be in the interest of patients at the European Union-level. The decentralized procedure provides for recognition by European Union national authorities of a first assessment performed by one of the member states. Under this procedure, an identical application for marketing authorization is submitted simultaneously to the national authorities of several European Union member states, one of them being chosen as the "Reference Member State", and the remaining being the "Concerned Member States". The Reference Member State must prepare and send drafts of an assessment report, summary of product characteristics and the labelling and package leaflet within 120 days after receipt of a valid marketing authorization application to the Concerned Member States, which must decide within 90 days whether to recognize approval. If any Concerned Member State does not recognize the marketing authorization on the grounds of potential serious risk to public health, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states. The mutual recognition procedure is similar to the decentralized procedure except that a medicine must have already received a marketing authorization in at least one of the member states, and that member state acts as the Reference Member State.

As in the U.S., we may apply for designation of a product candidate as an orphan drug for the treatment of a specific indication in the European Union before the application for marketing authorization is made.

Orphan drugs in the European Union enjoy economic and marketing benefits, including up to ten years of market exclusivity for the approved indication unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan-designated product, the marketing authorization holder is unable to supply sufficient quantity of the medicinal product or the marketing authorization holder has given its consent.

Coverage and Reimbursement

Sales of our products will depend, in part, on the extent to which our products will be covered by third-party payors, such as government health programs, commercial insurance and managed healthcare organizations. These third-party payors are increasingly reducing reimbursements for medical products and services. Additionally, the containment of healthcare costs has become a priority of federal and state governments and the prices of therapeutics have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of 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 our net revenue and results. If these third- party payors do not consider our products to be cost-effective compared to other therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

Healthcare Reform

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (together, the "ACA") has had a significant impact on the health care industry. The ACA expanded coverage for the uninsured while at the same time containing overall healthcare costs. With regard to biopharmaceutical products, the ACA, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and a Medicare Part D coverage gap discount program, in which manufacturers had to offer 50% point-of-sale discounts, which, through subsequent legislative amendments, was increased to

70%, off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

Since its enactment, there have been judicial, executive and Congressional challenges to certain aspects of the ACA. 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 issued an executive order initiating 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.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted that impact payment methodologies and reimbursement amounts. On August 2, 2011, the Budget Control Act of 2011 among other things, created measures for spending reductions by Congress, which led to aggregate reductions to Medicare payments to providers of 2% per fiscal year starting in April 2013, and, due to subsequent legislative amendments, will stay in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022, unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 (the "ATRA") was signed into law which, among other things, also reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Recently, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. For example, the 21st Century Cures Act changed the reimbursement methodology for infusion drugs and biologics furnished through durable medical equipment in an attempt to remedy over- and underpayment of certain products. Furthermore, the Build Back Better Act, if enacted, would introduce substantial drug pricing reforms, including the establishment of a drug price negotiation program within the U.S. Department of Health and Human Services that would require manufacturers to charge a negotiated "maximum fair price" for certain selected drugs or pay an excise tax for noncompliance, and the establishment of rebate payment requirements on manufacturers of certain drugs payable under Medicare Parts B and D. If the Build Back Better Act is not enacted, similar or other drug pricing proposals could appear in future legislation. Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. We cannot predict the extent of the impact of any changes to any of these laws on us.

Finally, in some foreign countries, the proposed pricing for a product candidate must be approved before it may be lawfully marketed. The requirements governing therapeutic pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product, or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. 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, therapeutic candidates launched in the European Union do not follow price structures of the U.S. and generally tend to be significantly lower.

Other Healthcare Laws

We may also be subject to healthcare regulation and enforcement by the federal government and the states and foreign governments where we may market our product candidates, if approved. These laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, physician and other health care provider payment and drug pricing transparency laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs. The Anti-Kickback Statute is subject to evolving interpretations. In the past, the government has enforced the Anti-Kickback Statute to reach large settlements with healthcare companies based on sham consulting and other financial arrangements with physicians. 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 majority of states also have anti-kickback laws, which establish similar prohibitions and, in some cases, may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Additionally, the civil False Claims Act prohibits knowingly presenting or causing the presentation of a false, fictitious or fraudulent claim for payment to the U.S. government, knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the U.S. government, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. government. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act. Actions under the False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. The federal government is using the False Claims Act, and the accompanying threat of significant liability, in its investigation and prosecution of pharmaceutical and biotechnology companies throughout the U.S., for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multi-billion-dollar settlements under the False Claims Act in addition to individual criminal convictions under applicable criminal statutes. Given the significant size of actual and potential settlements, it is expected that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The U.S. federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), created new federal criminal statutes that prohibit among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the 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.

There has also been a recent trend of increased federal and state regulation of payments made to physicians and other healthcare providers. The ACA, among other things, imposes new reporting requirements on drug manufacturers for payments made by them to physicians (as defined by statute), certain non-physician practitioners including physician assistants and nurse practitioners and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Certain states also mandate implementation of compliance programs and compliance with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, impose restrictions on drug manufacturer marketing practices and/or require the tracking and reporting of pricing and marketing information as well as gifts, compensation and other remuneration or items of value provided to physicians and other healthcare professionals and entities.

Penalties for violating any of such laws or any other governmental regulations that apply include, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, exclusion from participation in federal and state healthcare programs, integrity oversight and reporting obligations to resolve allegations of non-compliance and imprisonment.

Data Privacy and Security Laws

Numerous state, federal and foreign laws, regulations and standards govern the collection, use, access to, confidentiality and security of health-related and other personal information, and could apply now or in the future to our operations or the operations of our partners. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, certain foreign laws govern the privacy and security of personal data, including health-related data. For example, the General Data Protection Regulation ("GDPR") imposes strict requirements for processing the personal data of individuals within the European Economic Area ("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. Further, from January 1, 2021, companies have had to comply with the GDPR and also the United Kingdom GDPR ("UK GDPR"), which, together with the amended UK Data Protection Act 2018, retains the GDPR in UK 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. 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.

Environment

Our third-party manufacturers are subject to inspections by the FDA for compliance with cGMP and other U.S. regulatory requirements, including U.S. federal, state and local regulations regarding environmental protection and hazardous and controlled substance controls, among others. Environmental laws and regulations are complex, change frequently and have tended to become

more stringent over time. We have incurred, and may continue to incur, significant expenditures to ensure we are in compliance with these laws and regulations. We would be subject to significant penalties for failure to comply with these laws and regulations.

Our Company Origins and Team

Our Probody platform technology has its origins in work performed at the University of California, Santa Barbara ("UCSB"), by our scientific founder Professor Patrick Daugherty. Since our inception, we have continued developing and adding to this technology and aspire to design a pipeline of Probody therapeutics that will better the lives of cancer patients. We have assembled an experienced and talented group of individuals dedicated to the advancement of cancer care. Our chief executive officer and chairman, Dr. Sean McCarthy, leads a team that draws on robust experience in all phases of product discovery, clinical development and commercialization. Our clinical development team is led by Dr. Amy Peterson, president and chief operating officer, and Dr. Alison Hannah, chief medical officer. Our research and preclinical development team is led by Dr. Marcia Belvin, head of research, and includes renowned and established researchers. Our management team members have significant experience in oncology with previous experience at BeiGene, Chiron, Genentech, Maxygen, Medivation, Millennium, Novartis, SGX and other companies.

Human Capital

As of December 31, 2021, we had 174 full-time employees and 4 part-time employees. Of these employees, 137 were primarily engaged in research and development activities. None of our employees are represented by a labor union or covered by collective bargaining agreements and we consider our employee relations to be good. Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards.

Corporate Information

Our operations commenced in February 2008 when our predecessor entity was formed. We were incorporated in Delaware in September 2010. We maintain our executive offices at 151 Oyster Point Blvd., Suite 400, South San Francisco, California 94080, and our main telephone number is (650) 515-3185.

We view our operations and measure our business as one reportable segment operating in the United States. See Note 2 to our audited financial statement included elsewhere in this Annual Report on Form 10-K for additional information. Additional information required by this item is incorporated herein by reference to PART II. Item 6 of this Annual Report on Form 10-K.

Our research and development expenses were $114.2 million, $112.9 million, and $131.6 million for the years ended December 31, 2021, 2020, and 2019, respectively. Please see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Research and Development Expenses" for additional detail regarding our research and development activities.

We maintain a website at *www.cytomx.com*, which contains information about us. The information in, or that can be accessed through, our website is not part of this Annual Report on Form 10-K. Our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports are available, free of charge, on or through our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at *www.sec.gov*.

PART II – OTHER INFORMATION

Item 1A. Risk Factors

Risk Factors Summary

We are providing the following summary of risk factors contained in this Annual Report on Form 10-K to enhance the readability and accessibility of our risk factor disclosures in accordance with SEC rules. Please carefully review the full risk factors pertaining to this summary and to additional general risk factors contained in this Annual Report on Form 10-K in their entirety for additional information regarding the material factors that make an investment in our securities speculative or risky. These risks and uncertainties include, but are not limited to, the following:

- The COVID-19 pandemic or any future pandemic could adversely impact our business, including our research, clinical trials, including clinical trial site initiation and patient enrollment, and financial condition.
- We are a clinical-stage biopharmaceutical company with a limited operating history and have not generated any revenue from product sales.
- We expect that we will need to raise substantial additional funds to advance development of our product candidates and we cannot guarantee that this additional funding will be available on acceptable terms or at all.
- Clinical development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.
- Our product candidates are in early stages of development and may fail or suffer delays that materially and adversely affect their commercial viability.
- Interim, "top-line," and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.
- Our product candidates may cause undesirable side effects at any time during or after the clinical trial process that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any, including withdrawal from the market.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.
- Our approach to the discovery and development of our therapeutic treatments is based on novel technologies that are unproven and may not result in marketable products.
- The market may not be receptive to our product candidates based on a novel therapeutic modality, and we may not generate any future revenue from the sale or licensing of product candidates.
- We have entered, and may in the future seek to enter, into collaborations with third parties for the development and commercialization of our product candidates using our Probody platform. If we fail to enter into such collaborations, or such collaborations are not successful, we may not be able to capitalize on the market potential of our Probody platform and resulting product candidates.
- If we do not achieve our projected development and commercialization goals in the timeframes we announce and expect, the commercialization of any of our product candidates may be delayed, and our business will be harmed.
- We may not successfully engage in strategic transactions, including any additional collaborations we seek, which could adversely affect our ability to develop and commercialize product candidates, impact our cash position, increase our expense and present significant distractions to our management.
- We rely on third parties to conduct all of our clinical trials and certain of our preclinical studies and intend to continue to do so, and if such third parties do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development programs could be delayed with material and adverse effects on our business, financial condition, results of operations and prospects.
- Because we have no long-term contracts with and rely on third-party manufacturing and supply partners, most of which are sole source suppliers, our supply of research and development, preclinical and clinical development materials may become limited or interrupted or may not be of satisfactory quantity or quality.

- We, or third-party manufacturers, 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.
- 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.
- Our stock price may be volatile and purchasers of our common stock could incur substantial losses.

Risk Factors

You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations." If any of the following risks are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. The risks described below are not the only risks facing the Company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, results of operations and/or prospects.

Risks Related to Our Business

The COVID-19 pandemic or any future pandemic could adversely impact our business, including our research, clinical trials, and financial condition.

In December 2019, a novel strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China. Since then,COVID-19 has spread to multiple countries, including the United States and European and Asia-Pacific countries, including countries in which we have planned or active clinical trial sites, including for praluzatamab ravtansine (CX-2009). As COVID-19 and its variants continue to spread around the globe, we will likely continue to experience disruptions that could severely impact our business, research, including research for our partners or research of our partners, and clinical trials, including ongoing or planned clinical trials for praluzatamab ravtansine, CX-2029 and clinical trials of our partners, including Bristol Myers Squibb. These disruptions and impacts may include:

- delays or difficulties in enrolling patients in our clinical trials or the clinical trials of our partners;
- delays or difficulties in clinical site initiation for praluzatamab ravtansine, CX-2029, CX-904 or any other clinical trials we or our partners decide to initiate, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our or our partners' clinical trial sites and hospital staff supporting the conduct of our or our partners' clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others;
- difficulty in interpreting clinical data due to patients being infected by COVID-19;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials or the clinical trials of our partners, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- delays in receiving approval from local regulatory authorities to initiate our or our partners' planned clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our or our partners' clinical trials;
- interruption in manufacturing or global shipping that may affect the timely delivery or transport of research materials or clinical trial materials, such as investigational drug product used in our or our partners' clinical trials;
- changes in local regulations as part of a response to the COVID-19 outbreak which may require us or our partners to change the ways in which clinical trials are conducted, which may result in unexpected costs, or cause us or our partners to discontinue the clinical trials altogether;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- refusal of the FDA to accept data from clinical trials in affected geographies outside the United States.

For example, in March 2020, we announced the temporary pause in new patient enrollment and new site activation in our Phase 2 clinical trial of praluzatamab ravtansine as a result of the COVID-19 pandemic, primarily due to delays in patient enrollment and clinical site initiations, and the termination of the Phase 2 clinical trial of pacmilimab (CX-072) in combination with ipilimumab after a re-evaluation of the evolving clinical, competitive and commercial landscapes in immuno-oncology, taken together with impact of the COVID-19 pandemic. Since then, we have revised our strategy for developing praluzatamab ravtansine, including redesigning the study. While enrollment is ongoing for our Phase 2 clinical trial for praluzatamab ravtansine and the Phase 2 expansion cohorts for CX-2029, we cannot be certain of the continuing impact of the COVID-19 pandemic, including COVID-19 variants on clinical trial planning, or that site initiation, patient recruitment or other clinical trial activities will not continue to be delayed, discontinued or otherwise impacted.

Furthermore, the COVID-19 pandemic and government limitations on activities may continue to impact our ability to conduct research, including limiting our ability to obtain research materials and equipment, limiting access to our laboratories to conduct research, limiting the ability or willingness of employees to work at our facilities and limiting our ability to complete research and experiments in a timely basis or at all. For example, in March 2020 we initiated a mandatory work-from-home program, limiting onsite activity to a substantially reduced level of laboratory research activities. Although we have gradually increased levels of such laboratory research activities, we continue to operate in a hybrid, work-from-home environment and there can be no assurance that we will be able to continue to increase or maintain current levels of such activity. The COVID-19 pandemic and government limitations could further impact our ability to conduct business generally, including making timely payments, filing timely governmental and other business reports and filings, and otherwise comply with our obligations.

Any of the potential business, research and clinical impacts arising as a result of the COVID-19 pandemic could cause us to default on our obligations to our collaborative partners, including our specific research and development obligations, potentially resulting in termination of one or more collaborations, and could materially and adversely affect our business, financial condition, results of operation and prospects.

In addition, the spread of COVID-19 may negatively impact the trading price of shares of our common stock and could further severely impact our ability to raise additional capital on a timely basis or at all.

The global outbreak of COVID-19 continues to rapidly evolve, including with the discovery of new variants/mutations of the virus. The extent to which the COVID-19 pandemic continues to impact our business, including our clinical trials, research and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

We are a clinical-stage biopharmaceutical company with a limited operating history and have not generated any revenue from product sales. We have a history of losses, expect to continue to incur significant losses for the foreseeable future and may never achieve or maintain profitability, which could result in a decline in the market value of our common stock.

We are a clinical-stage biopharmaceutical company with a limited operating history, developing a novel class of therapeutic antibody product candidates, based on our proprietary biologic Probody technology platform. Since our inception, we have devoted our resources to the development of Probody therapeutics. We have had significant operating losses since our inception. As of December 31, 2021 and December 31, 2020, we had an accumulated deficit of $533.7 million and $450.1 million, respectively. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations.

Though we have developed our Probody platform, our technologies and product candidates are in early stages of development, and we are subject to the risks of failure inherent in the development of product candidates based on novel technologies. We have not yet demonstrated our ability to successfully complete any mid or late-stage clinical trials, including large-scale, pivotal clinical trials, obtain regulatory approvals, arrange for a third party to manufacture a commercial-scale product candidate, or conduct sales and marketing activities necessary for successful commercialization. Typically, it takes many years to develop one product candidate from the time it enters initial preclinical studies to when it is available for treating patients. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a longer operating history. We will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

Furthermore, we have never generated any revenue from product sales, and have not obtained regulatory approval for any of our product candidates. We also do not expect to generate any revenue from product sales for the foreseeable future, and we expect to continue to incur significant operating losses for the foreseeable future due to the cost of research and development, preclinical studies and clinical trials and the regulatory approval process for our product candidates. We expect our net losses to increase substantially as we continue clinical development of our lead programs and advance additional programs into clinical development. In particular, we expect our losses to increase substantially as we enroll patients in our Phase 2 clinical trial of praluzatamab ravtansine (CX-2009), our conditionally activated ADC candidate directed against CD166, as monotherapy or in combination with pacmilimab (CX-072) in patients with breast cancer, as we enroll patients in our Phase 2 expansion trial of CX-2029, our conditionally activated ADC candidate directed against CD71 in collaboration with AbbVie Inc., as we enroll patients in our Phase 1 clinical trial of CX-904, our conditionally activated T-cell-engaging bispecific antibody candidate against the epidermal growth factor receptor ("EGFR") in collaboration with Amgen, Inc., and as we advance into later trials and new trials for these and other programs. However, the amount of our future losses is uncertain. Our ability to achieve profitability, if ever, will depend on, among other things, our, or our collaborators, successfully developing product candidates, obtaining regulatory approvals to market and commercialize product candidates, manufacturing any approved products on commercially reasonable terms, establishing a sales and marketing organization or suitable third-party alternatives for any approved product and raising sufficient funds to finance business activities. If we, or our collaborators, are unable to develop our technologies and commercialize one or more of our product candidates or if sales revenue from any product candidate that receives approval is insufficient, we will not achieve profitability, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We expect that we will need to raise substantial additional funds to advance development of our product candidates and we cannot guarantee that this additional funding will be available on acceptable terms or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development and commercialization of our current or future product candidates.

The development of biopharmaceutical product candidates is capital-intensive. To date, we have used substantial funds to develop our technology and product candidates and will require significant funds to conduct our ongoing clinical trials as well as to further our research and development, preclinical testing and future clinical trials of additional product candidates, to seek regulatory approvals for our product candidates and to manufacture and market any products that are approved for commercial sale. In addition, we have incurred and will continue to incur additional costs associated with operating as a public company.

As of December 31, 2021, we had $305.2 million in cash, cash equivalents and investments. We believe that our existing capital resources will be sufficient to fund our planned operations at least for the next twelve months from the date the financial statements included in this report are issued. Our future capital requirements and the period for which we expect our existing resources to support our operations may vary significantly from what we expect. Our monthly spending levels vary based on our ongoing clinical trials, new and ongoing research and development and other corporate activities. For example, we expect our monthly spending to increase substantially as we enroll patients in our Phase 2 clinical trial of praluzatamab ravtansine (CX-2009) as monotherapy or in combination with pacmilimab (CX-072) in patients with breast cancer, as we enroll patients in our Phase 2 expansion trial of CX-2029, and as we enroll patients in our Phase 1 clinical trial of CX-904. Because the length of time and activities associated with conducting our clinical trials and successfully researching and developing our product candidates is highly uncertain, we are unable to estimate the actual funds we will require for development and, once any product candidate is approved, any subsequent marketing and commercialization activities.

The timing and amount of our operating expenditures will depend largely on:

- the scope, timing and progress of our ongoing clinical trials as well as any other preclinical and clinical development activities which may be affected by, among other things, the COVID-19 pandemic;
- the number, size and type of clinical trials and preclinical studies that we may be required to complete for our product candidates, as well as the cost and time of such studies and trials;
- the number, scope and prioritization of preclinical and clinical programs we decide to pursue;
- the time and cost necessary to produce clinical supplies of our product candidates;
- the time and cost necessary to scale our manufacturing capabilities prior to or following regulatory approval and commercial launch of any product candidates;
- the progress of the development efforts of parties with whom we have entered or may in the future enter into collaborations and research and development agreements;
- the timing and amount of payments we may receive or are obligated to pay under our collaboration agreements and license agreements;

- our ability to maintain our current licenses and research and development programs and to establish new collaboration arrangements;
- the costs involved in prosecuting and enforcing patent and other intellectual property claims, including the ongoing patent infringement lawsuit brought by Vytacera against us;
- the cost of any existing or future litigation to which we are or may become a party;
- the cost and timing of regulatory approvals; and
- our efforts to enhance operational systems and hire additional personnel, including personnel to support development and commercialization of our product candidates and satisfy our obligations as a public company.

If we are unable to obtain funding on a timely basis or on acceptable terms, we may have to delay, reduce or terminate our research and development programs and preclinical studies or clinical trials, 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 unless and until our product candidates are clinically tested, approved for commercialization and successfully marketed. To date, we have financed our operations primarily through sales of our common stock, sale of our convertible preferred securities prior to our IPO and payments received under our collaboration agreements, including, most recently, the Collaboration and License Agreement that we entered into with Astellas in March 2020. We will be required to seek additional funding in the future and currently intend to do so through additional collaborations, public or private equity offerings or debt financings, credit or loan facilities or a combination of one or more of these funding sources. Our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control, including the COVID-19 pandemic. Additional funds may not be available to us on acceptable terms or at all. 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. Debt financing, if available, is likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities received any distribution of our corporate assets.

Clinical development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

As is the case with all oncology drugs, our product candidates in clinical development or preclinical development go through a long process and have a high risk of failure, including termination for strategic reasons. It is impossible to predict when or if any of our or our partner's product candidates will prove safe, pure and potent (or effective) in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we or our partners must complete extensive clinical trials to demonstrate the safety, purity and potency (or efficacy) of our product candidates in humans. Commencement of clinical trials for programs beyond praluzatamab ravtansine, CX-2029, BMS-986249, BMS-986288, and pacmilimab and CX-904 is subject to finalizing the trial design and submission of an IND or similar submission to the FDA or similar global health authorities. In addition, even if we submit an IND or a comparable submission in other jurisdictions for these or other product candidates, including CX-2043, the FDA or other regulatory authorities could disagree that we have satisfied their requirements to commence our clinical trials or disagree with our study design, which may require us to complete additional preclinical studies or amend our protocols or impose stricter conditions on the commencement of clinical trials and may delay our ability to begin Phase 1 clinical trials, causing an increase in the amount of time and expense required to develop our product candidates including CX-2043. As a result of the foregoing, the research and development, preclinical studies and clinical testing of any product candidate is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the development process.

Further, we or our collaborators may also experience delays in completing ongoing clinical trials, completing preclinical studies or initiating further clinical trials of our product candidates, including, for example, among other things, as a result of the COVID-19 pandemic. We do not know whether our or our collaborators' ongoing clinical trials or preclinical studies will be completed on schedule or at all, or whether planned clinical trials or preclinical studies will begin on time, need to be redesigned, enroll patients on time or be completed on schedule, if at all. We or our collaborators may have insufficient internal resources to complete ongoing clinical trials or initiate clinical trials for our other product candidates. The development programs for our product candidates may also be delayed for a variety of reasons, including delays related to:

- recruiting suitable patients to participate in a clinical trial, particularly in light of the COVID-19 pandemic;

- developing and validating any companion diagnostic to be used in a clinical trial;
- the FDA or other regulatory authorities requiring us to submit additional data or imposing other requirements before permitting us to initiate a clinical trial;
- obtaining regulatory clearance to commence a clinical trial;
- reaching agreement on acceptable terms with prospective contract research organization ("CROs") and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- obtaining institutional review board ("IRB") approval at each clinical trial site;
- having patients complete a clinical trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- adding new clinical trial sites;
- manufacturing our product candidates in sufficient quality and quantity for use in clinical trials; or
- collaborators electing to not pursue development and commercialization of our product candidates.

In addition, 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. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or safety profiles, notwithstanding promising results in earlier trials.

Our product candidates are in early stages of development and may fail or suffer delays that materially and adversely affect their commercial viability. If we are unable to advance our product candidates through clinical development, obtain regulatory approval and ultimately commercialize such product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are very early in our development efforts, with only four product candidates, praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072), and CX-904 currently in early-stage clinical development. In addition, Bristol Myers Squibb is currently evaluating BMS-986249, a CTLA-4-directed Probody therapeutic in a randomized cohort expansion trial of a Phase 1/2 clinical trial that it initiated in January 2018, and BMS-986288, a second anti-CTLA-4 Probody, in a Phase 1/2 trial it initiated in 2019. We have no products on the market and our ability to achieve and sustain profitability depends on obtaining regulatory approvals for and successfully commercializing our product candidates, either alone or with third parties. Before obtaining regulatory approval for the commercial distribution of our product candidates, we or our collaborator must conduct extensive preclinical tests and clinical trials to demonstrate sufficient safety, purity and potency (or efficacy) of our product candidates in patients.

As a result, 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 approval of, or our ability to commercialize, product candidates, including:

- negative or inconclusive results from our clinical trials, the clinical trials of our collaborators or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- product-related side effects experienced by participants in our clinical trials, the clinical trials of our collaborators or by individuals using drugs or therapeutic biologics 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 or comparable foreign authorities regarding the scope or design of our clinical trials;
- delays in enrolling research subjects in clinical trials;
- high drop-out rates of research subjects;
- inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our or our collaborators' clinical trials;

- greater than anticipated clinical trial costs;
- delay in the development or approval of companion diagnostic tests for our product candidates;
- unfavorable FDA or other 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 and similar foreign regulatory agencies.

We could find that the therapeutics we or our collaborators pursue are not safe, pure, potent (or efficacious). Further, a clinical trial may be suspended or terminated by us, our collaborators, the IRBs of the institutions in which such trials are being conducted, the Data Safety Monitoring Board for such trial or by the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug or therapeutic biologic, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Furthermore, we expect to rely on our collaborators, CROs and clinical trial sites to ensure proper and timely conduct of our clinical trials and while we expect to enter into agreements governing their committed activities, we have limited influence over their actual performance.

If we or our collaborators experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues or receive royalties from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenues. Furthermore, if one or more of our product candidates or our Probody therapeutic technology generally prove to be ineffective, unsafe or commercially unviable, the development of our entire platform and pipeline could be delayed, potentially permanently. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

For example, in March 2020, we made the strategic decision to terminate our Phase 2 clinical trial evaluating pacmilimab in combination ipilimumab in melanoma. This decision followed a re-evaluation of the evolving clinical, competitive and commercial landscapes in immuno-oncology, taken together with the impact of the COVID-19 pandemic.

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

From time to time, we may publicly disclose preliminary or top-line data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. For example, in December 2021 we announced preliminary data on two of the four expansion cohorts for CX-2029. We can make no assurances that the ultimate trial results for these two cohorts will be consistent with or better or worse than that reported data. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. Further, as a result of the COVID-19 pandemic or for other reasons, we may not be able to collect accurate or complete data at the time we collect such preliminary data, including as a result of the inability of sites to properly record data due to staffing limitations or the inability of patients to visit sites at scheduled times, the inability of CROs to access site data or for other reasons. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available or as patients from our clinical trials continue other treatments for their disease. Adverse differences between preliminary, top-line, or interim data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure.

Our product candidates may cause undesirable side effects at any time during or after the clinical trial process that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any, including withdrawal from the market.

Undesirable side effects caused by our product candidates could cause us, our collaborators or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities. As is the case with all oncology drugs, there may be immediate or late side effects associated with the use of our product candidates (e.g., praluzatamab ravtansine (CX-2009), CX-2029, and pacmilimab (CX-072)). There can be no assurance that unexpected adverse events will not occur in our ongoing trials or in future trials involving our product candidates or the product candidates of our collaborators. Undesirable side effects may appear in later trials that were not observed in our earlier trials or may be more severe in later trials than earlier trials.

In May 2020, we reported that the administration of monotherapy pacmilimab had been generally well tolerated with the majority of treatment-related adverse events ("TRAEs") as Grade 1/2. At that time, we also reported that of the 114 monotherapy patients treated with 10 mg/kg every two weeks and who were evaluable for safety, ten (9%) patients experienced a grade ≥3 TRAE, and two (2%) experienced grade ≥3 immune-related adverse events ("irAEs"), with two (2%) TRAEs leading to treatment discontinuation. In June 2019, we also reported that at the 10 mg/kg dose, the anti-drug antibody ("ADA") rate was approximately 62%. While we do not believe this ADA is impacting our ability to reach targeted drug exposures, we cannot provide assurance that the rate will not change or that it will not later limit drug exposure or cause severe adverse events. We also cannot provide assurance that the rates and the types of adverse events will not increase with time as more patients are treated in ongoing or future studies.

Administration of pacmilimab in combination with ipilimumab has been generally well tolerated with the majority of TRAEs as Grade 1/2. In October 2019, we reported that of the 27 patients treated across all combination doses, Grade 3/4 TRAEs were reported in nine (33%) patients and Grade 3/4 irAEs were reported in six (22%) patients. Of the 20 patients treated with ipilimumab at 3 mg/kg at varying doses of pacmilimab, Grade 3/4 TRAEs were reported in five (25%) patients and Grade 3/4 irAEs were reported in three (15%) patients. We cannot provide assurance that these rates and the types of adverse events will not increase over time with more patients being treated in future studies of our product candidates.

Administration of praluzatamab ravtansine has also been generally well tolerated with most reported TRAEs being Grade 1/2. In May 2020, we announced that 34/92 (37%) patients experienced a Grade 3/4 TRAE. The most common adverse event observed was ocular toxicity, an anticipated toxicity associated with the DM4 payload. Other Grade 3/4 TRAEs included liver function test abnormalities, gastrointestinal disorders and nervous system disorders. We cannot guarantee that these rates and the types of adverse events will not increase over time with more patients being treated in ongoing or future studies.

In May 2020, we announced that CX-2029 was generally well tolerated at doses up to 3 mg/kg with the most common TRAEs being infusion related reactions, anemia and neutropenia/leukopenia. Grade 3 or greater hematologic TRAEs, anemia and neutropenia, were dose dependent, with anemia being managed with transfusions and supportive care. In December 2021, we announced preliminary data on two of four expansion cohorts for CX-2029, including that the most common Grade 3 TRAEs in 10% or more of patients were anemia (67.3%) and decreased neutrophil count (9.6% (plus one Grade 4 event 1.9%)). The etiology of anemia remains under investigation and is likely to be multi-factorial. While the MMAE payload is known to be associated with anemia, preclinical studies have shown that reduction of red blood cell precursors has been observed in response to targeting CD71, which is known to play a role in early erythroid development. Although we believe these TRAEs are manageable, there can be no assurance that the rate or severity of any of these side effects will not increase over time with more patients being treated in ongoing or future studies.

The results of our or our collaborators' future clinical trials could reveal a high and unacceptable severity of adverse side effects, including immune system related adverse events or increased toxicity, and it is possible that patients enrolled in such clinical trials could respond in unexpected ways or otherwise have unexpected adverse events. For example, in 2022 we are in the process of

initiating a first-in-human Phase 1 clinical trial with CX-904 and, while we believe our preclinical studies indicate the potential to reach a favorable therapeutic index, clinical data will be necessary to specify an acceptable dose. We cannot provide assurance that we will reach an acceptable dose for CX-904.

Additionally, the Phase 2 clinical trial of BMS-986249 being conducted by Bristol Myers Squibb includes the administration of the product candidate at relatively high dosage levels, which could further exacerbate such risks. In our Phase 2 clinical trials with praluzatamab ravtansine and CX-2029, we are targeting CD166 and CD71, respectively, targets that are broadly expressed on normal tissue, which could create unacceptable toxicity or fail to result in anti-tumor activity. For instance, CD71 is a metabolic protein with high levels of expression in healthy tissues, and the consequences of targeting such protein in humans are unknown. Any future clinical trials of our product candidates could face similar or heightened risks depending on the modality. Similarly, the combination of EGFR and CD3 has been shown to induce significant toxicities in preclinical animal studies due to the widespread expression of each target.

In the event that our clinical trials or the clinical trials of our collaborators reveal severe adverse side effects, our or our collaborators' clinical trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could impose a clinical hold, order us to cease further development of or deny 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. For example, in our Phase 1/2 clinical trial of praluzatamab ravtansine, some patients stopped treatment due to ocular toxicity. While we are using ocular toxicity prophylactic measures in our Phase 2 clinical trial, we cannot be assured that such measures will be effective. In addition, any of these occurrences with respect to one of our product candidates could negatively affect our or any collaborator's ability to enroll patients and seek regulatory approval for other product candidates that we have developed using our Probody platform, which could also result in a collaborator terminating any program utilizing our Probody platform and the termination of such collaborative relationship. 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 receives regulatory approval and we, our collaborators or others identify undesirable side effects caused by such product or any other Probody therapeutics, 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 approval of the product or seize the product;
- we or our collaborators 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.

In addition, adverse side effects caused by any drugs of other companies utilizing the same or similar antibodies of our product candidates, or that are similar in nature to our product candidates could delay or prevent regulatory approval of our product candidates, limit the commercial profile of an approved label for our product candidates, or result in significant negative consequences following marketing approval.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of our product candidates and could substantially increase the costs of commercializing our product candidates, if approved, and significantly impact our ability to successfully commercialize our product candidates and generate revenues.

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

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors, including:

- the ongoing COVID-19 pandemic;
- the size and nature of the target patient population;
- the eligibility criteria for the clinical trial;
- the design of the clinical trial;
- the availability of an appropriate genomic screening test;
- the perceived risks and benefits of the product candidate under study;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

For example, in March 2020, we announced a temporary pause in new patient enrollment and new site activation in our Phase 2 clinical trial of praluzatamab ravtansine as a result of the COVID-19 pandemic. We revised our strategy for praluzatamab ravtansine and in December 2020, we initiated a new Phase 2 clinical trial of praluzatamab ravtansine, for which we anticipated to report initial clinical data in the fourth quarter of 2021. However, in August 2021, we announced that primarily due to the COVID-19 pandemic, we anticipate initial clinical data from that trial in 2022. There can be no assurances that the COVID-19 pandemic will not continue to have a significant impact on our ability to complete our ongoing clinical trials and enroll patients in any planned or future clinical trials.

In addition, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs or therapeutic biologics that may be approved for the indications we are investigating, could affect our ability to enroll a sufficient number of eligible patients in our clinical trials. There are currently several PD-1 and/or PD-L1 agents approved for a growing list of cancer types along with thousands of clinical trials exploring the use of PD-1 and PD-L1 agents. There can be no assurance that further trials with pacmilimab (CX-072) or our other drug candidates will not be adversely affected by a limited patient population. Our clinical trials of praluzatamab ravtansine and CX-2029 study patients who have one or a select number of specific tumor types rather than patients suffering from any cancer, which limits the rate of enrollment of the trial. In addition, some of our clinical trials seek to treat indications with small population sizes which could be particularly difficult to enroll. Our clinical trials of praluzatamab ravtansine and CX-2029 are also competing with thousands of clinical trials with alternative anti-cancer drugs in a similar class (e.g. antibody-drug conjugates), and certain arms of the clinical trials may be difficult to enroll due to the emerging standard of care for such indications in certain jurisdictions, including the United States. Likewise, our clinical trial of CX-904 is also competing with thousands of other anti-cancer clinical trials. Any clinical trials of our product candidates initiated by our collaborators, including Bristol Myers Squibb's ongoing Phase 2 clinical trial, face similar and additional risks relating to enrollment. We or our collaborators could also encounter delays in the development of any of our product candidates if prescribing physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Any delays relating to patient enrollment could cause significant delays in the timing of our or our collaborators' clinical trials, which may materially and adversely affect our business, financial condition, results of operations and prospects.

Our approach to the discovery and development of our therapeutic treatments is based on novel technologies that are unproven and may not result in marketable products.

We plan to continue to develop a pipeline of product candidates using our proprietary Probody platform. We believe that product candidates (including cancer immunotherapies, conditionally activated ADCs and bispecific antibodies) identified with our product discovery platform may offer an improved therapeutic approach by taking advantage of unique conditions in the tumor microenvironment, thereby reducing the dose-limiting toxic effects associated with traditional antibody products, which can also attack healthy tissue. However, the scientific research that forms the basis of our efforts to develop product candidates based on our Probody platform is ongoing, including the research resulting from our ongoing clinical trials for praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072) and CX-904.

We may ultimately discover that our Probody platform and any product candidates resulting from it do not possess certain properties required for therapeutic effectiveness or protection from toxicity. For example, when Probody therapeutics are administered to human subjects, protease levels in tumors may not be sufficient and the peptide mask may not be cleaved, which would limit the potential efficacy of the antibody. In addition, if the peptide mask is inappropriately released, for example, due to an inflammatory disease, it may reduce the potential to limit toxicity of the anti-cancer agent or result in unforeseen events when administered in humans. Binding of the peptide mask to the antigen-binding domain of the Probody may not be constant, which could lead to intermittent periods when the antigen-binding domain or antibody portion is unmasked. Furthermore, Probody product candidates may not remain stable in the human body for the period of time required for the drug to reach and to bind to the target tissue. In addition, product candidates based on our Probody platform may demonstrate different chemical and pharmacological properties in patients than they do in laboratory studies. Although our Probody platform and certain product candidates have demonstrated successful results in animal studies, they may not demonstrate the same chemical and pharmacological properties in humans and may interact with human biological systems in unforeseen, ineffective or harmful ways. Our understanding of the molecular pharmacology of Probody therapeutics, that is, the precise manner and sequence in which they are activated and behave in vivo, is incomplete. Probody therapeutics are complex biological molecules and we are evaluating the performance of this new technology in cancer patients for the first time. Many specific elements of Probody therapeutic function may contribute to their overall safety and efficacy profile including, but not limited to, the removal of only one mask from the dually-masked antibody, the removal of both masks from the dually-masked antibody, the binding strength of masks for the underlying antibody, and the binding strength of the underlying antibody for its target. We have limited structural evidence for how masks interact with antibodies. It may take many years before we develop a full understanding of Probody pharmacology, and we may never know precisely how they function in vivo. As with any new biologic or product developed on a novel platform, we have a limited understanding of the immunogenicity profile of Probody therapeutics. As a result, our Probody product candidates may trigger immune responses, such as anti-drug antibody ("ADA"), that may inhibit the ability of the antibody to reach the target tissue, inhibit the ability of the antibody to bind to its target, cause adverse side effects in humans or cause hypersensitivity reactions. For example, we reported in February 2019 that in our pacmilimab trial at the 10 mg/kg dose, the ADA rate was approximately 62%. We do not believe the ADA rate is impacting our ability to reach targeted drug exposures. However, we cannot provide assurance that it will not later limit drug exposure or cause severe adverse events. Problems that are specific to our Probody platform may have an unfavorable impact on all of our product candidates. As a result, we may never succeed in developing a marketable product and we may never become profitable, which would cause the value of our common stock to decline.

In addition, the scientific evidence to support the feasibility of developing product candidates against novel, difficult to drug targets, is both preliminary and limited. For example, our understanding of the expression of CD166 and CD71 in both healthy and diseased tissues is still developing. As a result, we cannot provide any assurance that we will be able to successfully identify and advance any product candidates to target novel, difficult-to-drug targets.

We believe the only clinical experience that the FDA and foreign regulatory authorities have with Probody-based therapeutics in oncology comes from praluzatamab ravtansine, CX-2029, BMS-986249, BMS-986288, and pacmilimab. We believe that the FDA and foreign regulatory authorities, have no clinical experience in other disease areas, and such limited experience may increase the complexity, uncertainty and length of the regulatory approval process for our product candidates and may keep us from commencing first-in-human trials in certain countries. As there is limited historical precedent for the regulatory clearance of Probody-based therapeutics in oncology, there is a higher degree of risk that the FDA or other regulatory authorities could disagree that we or our collaborators have satisfied their requirements to commence clinical trials for some product candidates or disagree with our study designs, which may require us to complete additional preclinical studies or amend our protocols or impose stricter conditions on the commencement of clinical trials. In addition, local clinical practice in other countries may affect whether we or our collaborators are able to initiate a clinical trial there. As a result, we and our collaborators may never receive approval to market and commercialize any product candidate. Even if we or our collaborators obtain regulatory approval, the approval may be for targets, disease indications or patient populations that are not as broad as we or they intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We or our collaborators may be required to perform additional or unanticipated clinical trials to obtain approval or be subject to post-marketing testing requirements to maintain regulatory approval. If one or more of our product candidates or our Probody technology generally prove to be ineffective, unsafe or commercially unviable, our entire platform and pipeline may have little, if any, value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

Even if regulatory approval is obtained for a product candidate, we may not generate or sustain revenue from sales of the product due to factors such as whether the product can be sold at a competitive cost and whether it will otherwise be accepted in the market. The product candidates that we are developing are based on our Probody platform, which is a new technology and therapeutic approach. 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 our Probody 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 collaborators. This may be particularly true for any of our product candidates (including BMS-986249, BMS-986288, and pacmilimab (CX-072) for which there are existing approved therapies, such as approved agents targeting PD-L1, PD-1, or CTLA-4. Market acceptance of our product candidates will depend on, among other factors:

- the timing of our receipt of any marketing and commercialization approvals;
- the terms of any approvals and the countries in which approvals are obtained;
- the safety, purity, potency (or efficacy) of our product candidates, including those being developed by our collaborators;
- 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 regulatory authority;
- the availability of effective companion diagnostics;
- 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 coverage and adequate reimbursement from government and third-party payors;
- the pricing of our products, particularly as compared to alternative treatments; and
- the 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 entered, and may in the future seek to enter, into collaborations with third parties for the development and commercialization of our product candidates using our Probody platform. If we fail to enter into such collaborations, or such collaborations are not successful, we may not be able to capitalize on the market potential of our Probody platform and resulting product candidates.

Since 2013, we have entered into collaborations with AbbVie, Amgen, Astellas, Bristol Myers Squibb, ImmunoGen, Pfizer and others to develop certain Probody therapeutics. We may in the future seek third-party collaborators for development and commercialization of other therapeutic technologies or product candidates. Biopharmaceutical companies are our prior and likely future collaborators for any marketing, distribution, development, licensing or broader collaboration arrangements. With respect to our existing collaboration agreements, and what we expect will be the case with any future collaboration agreements, we have and would expect to have limited control over whether such collaborations pursue the development of our product candidates or the amount and timing of resources that such collaborators dedicate to the development or commercialization of our product candidates. For instance, in March 2018, Pfizer terminated the collaboration agreement we had entered into with them in May 2013. Such collaboration agreement had entitled Pfizer to nominate up to four research targets and since 2013, we had collaborated with Pfizer on three of such targets. However, no program was ever advanced beyond the lead optimization stage pursuant to the agreement, and Pfizer had previously elected not to select a fourth target and had decided to discontinue its epidermal growth factor receptor conditionally activated ADC. In July 2017, ImmunoGen discontinued the preclinical evaluation of one of its two programs being developed under our collaboration and in December 2019, licensed the other program to us, terminating their license agreement from us. In addition, in January 2019, Bristol Myers Squibb terminated its programs for three targets it had selected under our agreement with them. As a result, there can be no assurances that any of the programs covered by our existing or future collaborations will be developed further. Further, our ability to generate revenues from our existing and future arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements. Additionally, some of our collaborations may require us to share in certain development and commercialization expenses. If we cannot afford to share such expenses when required, our rights under such collaborations may be adversely affected, including potentially that our collaborators may terminate the relevant agreement.

Overall, collaborations involving our product candidates currently pose, and will continue to pose, the following risks to us:

- collaborators have significant discretion in determining the amount and timing of efforts and resources that they will apply to these collaborations, including, with respect to Bristol Myers Squibb, BMS-986249 and BMS-986288;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on preclinical or clinical trial results, changes in the collaborators' strategic focus or available funding or resources, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators have significant discretion in designing any clinical trials they operate pursuant to our collaboration agreements, including Bristol Myers Squibb's ongoing Phase 2 cohort expansion of BMS-986249 and its Phase 1/2 clinical trial of BMS-986288, and may release data from such clinical trials, including with respect to our Probody therapeutics, without consulting us;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing and are not necessarily required to give us information about their clinical data;
- collaborators may independently develop, or develop with third parties, products that compete directly or indirectly with our product candidate if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- collaborators with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to litigation or potential liability;
- collaborators may infringe, misappropriate or otherwise violate the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our product candidate or that result in costly litigation or arbitration that diverts management attention and resources; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

As a result of the foregoing, our current and any future collaboration agreements may not lead to development or commercialization of our product candidates in the most efficient manner or at all and may not result in the realization of the benefits we expected to achieve upon our entry into such agreements. Any failure to successfully develop or commercialize our product candidates pursuant to our current or any future collaboration agreements could have a material and adverse effect on our business, financial condition, results of operations and prospects.

If our collaborators cease development efforts under our collaboration agreements, or if any of those agreements are terminated, these collaborations may fail to lead to commercial products and we may never receive milestone payments or future royalties under these agreements.

Substantially all of our revenue to date has been derived from our existing collaboration agreements, including, most recently, the agreement that we entered into with Astellas in March 2020, and a significant portion of our future revenue and cash resources is expected to be derived from these agreements or other similar agreements we may enter into in the future. Revenue from research and development collaborations depend upon continuation of the collaborations, reimbursement of development costs, the achievement of milestones and royalties, if any, derived from future products developed from our research. If our development partners do not select additional targets and we are unable to successfully advance the development of our product candidates or achieve milestones, revenue and cash resources from milestone payments under our collaboration agreements will be substantially less than expected.

In addition, to the extent that any of our collaborators were to terminate a collaboration agreement, we may decide to independently develop these product candidates to the extent we retain development rights. Such development could include funding preclinical or clinical trials, assuming marketing and distribution costs and defending intellectual property rights. Alternatively, in certain instances, we may choose to abandon product candidates altogether. For instance, in March 2018, Pfizer terminated our 2013 collaboration agreement with them, and in January 2019, Bristol Myers Squibb terminated its programs for three targets that it had selected under our agreement with them. The termination of any of our collaboration agreements or individual programs within a collaboration agreement could result in a change to our business plan and may have a material adverse effect on our business, financial condition, results of operations and prospects. If a collaboration is terminated, we would not be eligible to receive the milestone, royalty or other payments that would have been payable under the collaboration agreement. For example, as a result of ImmunoGen's decision to out-license the EpCAM program and our licensing of the program from them in 2019, their license for the program from us ended and we will not receive milestone or other payments from them.

If we do not achieve our projected development and commercialization goals in the timeframes we announce and expect, the commercialization of any of our product candidates may be delayed, and our business will be harmed.

For planning purposes, we sometimes estimate the timing of the accomplishment of various scientific, clinical, regulatory and other product development objectives. These milestones may include our expectations regarding the commencement or completion of scientific studies and clinical trials, the submission of regulatory filings, or commercialization objectives. From time to time, we may publicly announce the expected timing of some of these milestones, such as the completion of an ongoing clinical trial, the initiation of other clinical programs, receipt of marketing approval, or a commercial launch of a product. The achievement of many of these milestones may be outside of our control. All of these milestones are based on a variety of assumptions which may cause the timing of achievement of the milestones to vary considerably from our estimates, including:

- our available capital resources or capital constraints we experience;
- the rate of progress, costs and results of our clinical trials and research and development activities, including the extent of scheduling conflicts with participating clinicians and collaborators;
- our ability to identify and enroll patients who meet clinical trial eligibility criteria;
- our receipt of approvals by the FDA and other regulatory authorities and the timing thereof;
- other actions, decisions or rules issued by regulators;
- our ability to access sufficient, reliable and affordable supplies of materials used in the manufacture of our product candidates;
- our ability to manufacture and supply clinical trial materials to our clinical sites on a timely basis;
- the efforts of our collaborators with respect to the commercialization of our products; and
- the securing of, costs related to, and timing issues associated with, product manufacturing as well as sales and marketing activities.

For example, in March 2020, we announced the temporary pause in new patient enrollment and new site activation in our Phase 2 clinical trial of praluzatamab ravtansine (CX-2009) as a result of the COVID-19 pandemic and the termination of the Phase 2 clinical trial of pacmilimab (CX-072) in combination with ipilimumab after a re-evaluation of the evolving clinical, competitive and commercial landscapes in immuno-oncology, taken together with the impact of the COVID-19 pandemic. Further, we continue to see an impact as a result of the COVID-19 pandemic on our efforts, including ongoing clinical trial site activation and patient enrollment for praluzatamab ravtansine.

If we fail to achieve announced milestones in the timeframes we expect, the commercialization of any of our product candidates may be delayed, and our business and results of operations may be harmed.

We may not successfully engage in strategic transactions, including any additional collaborations we seek, which could adversely affect our ability to develop and commercialize product candidates, impact our cash position, increase our expense and present significant distractions to our management.

Since commencing operations, we have entered into several collaboration agreements, including the agreement that we entered into with Astellas in March 2020. From time to time, we may consider strategic transactions, such as additional collaborations, acquisitions of companies, asset purchases and out- or in-licensing of product candidates or technologies. In particular, we will evaluate and, if strategically attractive, seek to enter into additional collaborations, including with major biotechnology or biopharmaceutical companies. The competition for collaborators is intense, and the negotiation process is time-consuming and complex. Any new

collaboration may be on terms that are not optimal for us, and we may not be able to maintain any new collaboration if, for example, development or approval of a product candidate is delayed, sales of an approved product candidate do not meet expectations or the collaborator terminates the collaboration. Any such collaboration, or other strategic transaction, may require us to incur non-recurring or other charges, increase our near- and long-term expenditures and pose significant integration or implementation challenges or disrupt our management or business. These transactions would entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks and have a material and adverse effect on our business, financial condition, results of operations and prospects. The termination by a collaborator of a collaboration may cause a decrease in the price of our stock. Conversely, any failure to enter any additional collaboration or other strategic transaction that would be beneficial to us could delay the development and potential commercialization of our product candidates and have a negative impact on the competitiveness of any product candidate that reaches market.

If we are unable to successfully develop companion diagnostic tests for certain of our product candidates, or experience significant delays in doing so, we may not realize the full commercial potential of our product candidates.

Because we are focused on precision medicine, in which predictive biomarkers will be used to identify the right patients for our product candidates, we believe that our success may depend, in part, on the development of companion diagnostic tests. To successfully develop a companion diagnostic test, we would need to address a number of scientific, technical and logistical challenges. However, we have little experience in the development of companion diagnostic tests and may not be successful in developing appropriate tests to pair with any of our product candidates. Companion diagnostic tests are subject to regulation by the FDA and similar regulatory authorities outside the United States as medical devices and require separate regulatory approval prior to commercialization. Given our limited experience in developing companion diagnostic tests, we could seek to rely on third parties to design, manufacture, obtain regulatory approval for any companion diagnostic tests for our product candidates. However, we and such collaborators may encounter difficulties in developing and obtaining approval for the companion diagnostic tests, including issues relating to selectivity/specificity, analytical validation, reproducibility, or clinical validation. Any delay or failure by us or our collaborators to develop or obtain regulatory approval of the companion diagnostic tests could delay or prevent approval of our product candidates. As a result, our business would be harmed, possibly materially.

We rely on third parties to conduct all of our clinical trials and certain of our preclinical studies and intend to continue to do so, and if such third parties do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development programs could be delayed with material and adverse effects on our business, financial condition, results of operations and prospects.

We do not have the ability to independently conduct clinical trials. As such, we currently rely and intend to continue to rely on third-party clinical investigators, CROs, clinical data management organizations and consultants to help us design, conduct, supervise and monitor clinical trials of our product candidates. As a result, we will have less control over the timing, quality and other aspects of our clinical trials than we would have had we conducted them on our own. These investigators, CROs and consultants are not our employees and we have limited control over the amount of time and resources that they dedicate to our programs. These third parties may have contractual relationships with other entities, some of which may be our competitors, which may draw time and resources from our programs. The third parties with which we contract might not be diligent, careful or timely in conducting our preclinical studies or clinical trials, resulting in the preclinical studies or clinical trials being delayed or unsuccessful. Furthermore, our third-party contractors, including CROs are being and may continue to be impacted in their ability to conduct our work as a result of the COVID-19 pandemic.

If we cannot contract with acceptable third parties on commercially reasonable terms, or at all, or if these third parties do not carry out their contractual duties, satisfy legal and regulatory requirements for the conduct of preclinical studies or clinical trials or meet expected deadlines, our clinical development programs could be delayed and otherwise adversely affected. In all events, we will be responsible for ensuring that each of our preclinical studies and clinical trials are conducted in accordance with the general investigational plan and protocols for the trial. The FDA requires preclinical studies to be conducted in accordance with good laboratory practices ("GLPs") and clinical trials to be conducted in accordance with good clinical practices ("GCPs"), including for designing, conducting, recording and reporting the results of preclinical studies and clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. Our reliance

on third parties that we do not control will not relieve us of these responsibilities and requirements. Any adverse development or delay in our clinical trials could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We are currently conducting and will continue to conduct clinical trials and will contract with third-party manufacturers in foreign countries, which could expose us to risks that could have a material adverse effect on the success of our business.

We have enrolled or are planning to enroll patients in our clinical trials outside the United States, including in Europe, Australia and South Korea. The acceptance of study data from clinical trials conducted outside the U.S. or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the U.S., the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study is well-designed and well-conducted in accordance with GCP requirements and the FDA is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the U.S. or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which could be costly and time-consuming, and which may result in current or future product candidates that we may develop not receiving approval for commercialization in the applicable jurisdiction.

Conducting clinical trials outside the United States also exposes us to additional risks, including risks associated with additional foreign regulatory requirements; foreign exchange fluctuations; patient monitoring and compliance; compliance with foreign manufacturing, customs, shipment and storage requirements; the severity of the COVID-19 pandemic in such jurisdictions; and cultural differences in medical practice and clinical research. We are also subject to risks associated with doing business globally, including commercial, political, and financial risks. In addition, we are subject to potential disruption caused by military conflicts; potentially unstable governments or legal systems; civil or political upheaval or unrest; local labor policies and conditions; possible expropriation, nationalization, or confiscation of assets; problems with repatriation of foreign earnings; economic or trade sanctions; closure of markets to imports; anti-American sentiment; terrorism or other types of violence in or outside the United States; health pandemics; and a significant reduction in global travel. For example, pandemics and public health emergencies, such as the COVID-19 pandemic, have disrupted and delayed and could in the future disrupt or delay enrollment in our clinical trials in Europe, South Korea and elsewhere. Our success will depend, in part, on our ability to overcome the challenges we encounter with respect to these risks and other factors affecting U.S. companies with global operations. If our global clinical trials or foreign third-party suppliers were to experience significant disruption due to these risks or for other reasons, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

Because we have no long-term contracts with and rely on third-party manufacturing and supply partners, most of which are sole source suppliers, our supply of research and development, preclinical and clinical development materials may become limited or interrupted or may not be of satisfactory quantity or quality.

We rely on third-party contract manufacturers to manufacture our clinical trial and preclinical study product supplies which, in addition to having other issues, could be adversely impacted by the COVID-19 pandemic. Most of our clinical trial manufacturing contractors and suppliers are our sole source for their respective manufacturing and supplies. Failure of any of these contractors could put our ability to have clinical trial material available when needed. This could result in a substantial delay of our clinical trials. For each of praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072), and CX-904, our manufacturing supply chain includes several contract manufacturers, and failure by any of these manufacturers could result in interruptions of our clinical studies. For example, in November 2019, one of our contract manufacturers that manufactures pacmilimab experienced a production failure. If we had not been able to assure sufficient supplies of clinical trial drug product after the production failure, we may have been required to suspend any ongoing trials and postpone future trials. Although we have taken sufficient steps to assure our current supply of pacmilimab clinical trial drug product for our ongoing clinical trial and planned clinical trials, there can be no assurance that we will not have future production failures, which could affect our ability to conduct our trials for praluzatamab ravtansine, CX-2029, pacmilimab, CX-904 or any other clinical trial drug candidates on our planned timeline or at all. We do not own manufacturing facilities for producing such supplies and do not have any long-term contracts and we do not currently have an alternative to any of our third-party contract manufacturers. 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 any of our third-party contract manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. In addition, we may encounter issues with transferring technology to a new third-party manufacturer, and we

may encounter regulatory delays if we need to move the manufacturing of our products from one third-party manufacturer to another. For example, we were dependent on ImmunoGen under our collaboration for certain steps in the manufacturing of clinical quantities of praluzatamab ravtansine. At the end of 2018, ImmunoGen closed their clinical manufacturing facility in Norwood, MA. This site provided clinical manufacturing support for the praluzatamab ravtansine program. We completed transfer of the drug substance manufacturing process from ImmunoGen to a CMO, where we have an existing relationship and which has expertise in the manufacture of antibody-drug conjugates at a clinical and commercial scale. While the manufacturing transfer process has been completed, there can be no assurance that we will not experience a disruption in the supply of praluzatamab ravtansine as a result of such transfer or that we will not experience any other disruption in the manufacture of praluzatamab ravtansine.

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 current Good Manufacturing Practices ("cGMPs"). In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, such as the pacmilimab manufacturing production failure our contract manufacturer experienced in November 2019, or if our supply of components or other materials becomes limited or interrupted for other reasons, such as one of our manufacturers going out of business, 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 approval for any product candidate. To the extent that we have existing, or enter into future, manufacturing arrangements with third parties, we will depend on these third parties to perform their obligations in a timely manner consistent with contractual and regulatory requirements, including those related to quality control and assurance. 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. We may find that our third-party manufacturer is unable to scale up the process in order to produce commercial quantities of our products. Our or a third party's failure to execute on our manufacturing requirements and comply with cGMPs could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of product candidates under development;
- delay in submitting regulatory applications, or receiving regulatory approvals, for product candidates;
- loss of the cooperation of a collaborator;
- 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
- in the event of approval to market and commercialize a product candidate, an inability to meet commercial demands for our products.

The supply chain for the manufacturing of our product candidates is complicated and can involve many parties. This is especially the case for our clinical-stage conditionally activated ADCs, praluzatamab ravtansine, CX-2029 and CX-904. If we were to experience any supply chain issues, our product supply could be seriously disrupted. In addition, we expect the logistical challenges associated with our supply chain to grow more complex as additional product candidates commence any clinical trials.

We, or third-party manufacturers, 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.

It may prove more challenging than we anticipate to manufacture products that incorporate our Probody therapeutic technology. In order to conduct clinical trials of our product candidates, including our clinical trials for praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072), and CX-904 we will need to manufacture them in large quantities. To date, we have generally been able to successfully manufacture praluzatamab ravtansine, CX-2029, and pacmilimab for our ongoing early-stage clinical trials. However, in November 2019, we had a production failure at one of our contract manufacturers that manufactured pacmilimab for our Phase 1/2

clinical trial and for our future trials. If we had not been able to assure sufficient supplies of clinical trial drug product after the production failure, we may have been required to suspend any ongoing trials and postpone future trials. Although we have taken sufficient steps to assure our current supply of pacmilimab clinical trial drug product for our planned clinical trials, there can be no assurance that we will not have future production failures, which could affect our ability to conduct our trials for praluzatamab ravtansine, CX-2029, pacmilimab, CX-904 or any other clinical trial drug candidates on our planned timeline or at all. Furthermore, in order to conduct later stage clinical trials of our product candidates, such as our Phase 2 clinical trial for praluzatamab ravtansine, and eventually, if approved, commercial products, we will need to manufacture them in larger quantities. We, or any manufacturing partners, may be unable to successfully increase the manufacturing scale and capacity for any of our product candidates in a timely or cost-effective manner, or at all. For example, we are currently working with our CMOs to change our manufacturing processes and formulations as well as scaling up for larger drug manufacturing capability, including praluzatamab ravtansine drug product for late-stage clinical trials and commercialization. However, we may have to start late-stage trials with our early clinical trial drug product and switch to late-stage or commercial drug product mid trial. In such event, the FDA will require us to complete bridging studies to compare the earlier stage material with late-stage or commercial material to assure comparability between the earlier trial material and the late- stage or commercial material. Changing formulation and scaling up the process is a complicated and difficult task. While we believe we can complete this process successfully, there can be no assurances that the changes we make to the drug product and manufacturing process will be successful or completed in a timely manner or that the FDA will not require additional development steps or studies from those we believe are necessary. If we are not able to scale up our manufacturing capabilities with respect to praluzatamab ravtansine, pacmilimab or any of our other product candidates, increase the life of drug stability of product candidates, or successfully complete the FDA's bridging requirements, we may not be able to successfully obtain FDA approval and commercialize product candidates in a timely manner or at all.

Additionally, we were dependent on ImmunoGen under our collaboration for certain steps in the manufacturing of clinical quantities of praluzatamab ravtansine. At the end of 2018, ImmunoGen closed their clinical manufacturing facility in Norwood, Massachusetts, which provided clinical manufacturing support for the praluzatamab ravtansine program. We completed the transfer of the drug substance manufacturing process from ImmunoGen to a contract manufacturer, where we have an existing relationship and with expertise in the manufacture of antibody drug conjugates at a clinical and commercial scale. While the manufacturing transfer process has been completed, there can be no assurance that we will not experience a disruption in the supply of praluzatamab ravtansine in connection with such transfer or that we will not experience any other disruption in the manufacturing of praluzatamab ravtansine. In addition, for CX-2029, the manufacturing of additional clinical quantities could be particularly difficult because we are relying on three different parties to manufacture supplies. If we, or any manufacturing partners, are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing, and clinical trials of that product candidate may be delayed or infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

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

Because we have limited financial and managerial resources, we focus on specific product candidates and indications, including praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072), and CX-904. As a result, we may forgo or delay pursuit of opportunities with those products in other indications or with other product candidates 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. Our spending on current and future research and development programs, including CX-2043, and product candidates for specific indications may not yield any commercially viable product candidates. 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.

We may experience difficulties in managing our growth and expanding our operations successfully.

We will need to grow our organization substantially to continue development and pursue the potential commercialization of praluzatamab ravtansine (CX-2009), CX-2029, pacmilimab (CX-072), CX-904 and our other product candidates, including CX-2043, as well as function as a public company. As we increase the number of our product candidates entering and advancing through preclinical studies and clinical trials, we will need to expand our development, regulatory and manufacturing capabilities or contract with additional organizations to provide these capabilities for us. In addition, we expect our collaborations to require greater resources as the development of our product candidates under such agreements progresses. In the future, we expect to also have to manage additional relationships with collaborators or partners, suppliers and other organizations. In particular, if the third parties on which we currently rely are not capable of delivering services or supplies in a manner that is sufficient to meet our requirements as we expand our operations, we could be required to contract with new third parties and there can be no assurances that the services or supplies of such third parties will be available on commercially reasonable terms, or at all. Furthermore, our ability to manage our operations and

future growth will require us to continue to increase headcount as well as 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.

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 drugs and therapeutic biologics 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 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. Additionally, there is intense and rapidly evolving competition in the biotechnology, biopharmaceutical and antibody and immunoregulatory therapeutics fields, and our competitors include larger and better funded biopharmaceutical, biotechnological and therapeutics companies. In addition, these companies compete with us in recruiting scientific and managerial talent.

We believe that while our Probody platform, its associated intellectual property and our scientific and technical know-how, give us a competitive advantage in this space, competition from many sources remains. The clinical development pipeline for cancer includes small molecules, antibodies and therapies from a variety of groups. In addition, numerous compounds are in clinical development for cancer treatment. As a result, our success will partially depend on our ability to develop and protect therapeutics that are safer and more effective 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 or if we are unable to utilize our Probody therapeutic technology to differentiate our Probody therapeutics from the products of our competitors. For instance, if any of our lead product candidates, including, praluzatamab ravtansine and CX-2029 are approved, they will compete with a range of therapeutic treatments that are either in development or currently marketed. A variety of oncology drugs and therapeutic biologics are currently on the market or in clinical development. The market for immunotherapies like pacmilimab (CX-072) is, in particular, highly competitive and the field is changing quickly. In March 2020, we made the strategic decision to terminate our Phase 2 study evaluating pacmilimab in combination ipilimumab. This decision followed a re-evaluation of the evolving clinical, competitive and commercial landscapes in immuno-oncology, taken together with the impact of the COVID-19 pandemic. Given the amount of time required to successfully develop and obtain regulatory approval for each of our product candidates, it is therefore possible that by the time we obtain any such approval, if ever, and commence sales, we may no longer be able to differentiate such product candidate from those of our competitors.

We face substantial competition from pharmaceutical companies developing products in oncology, including companies such as Amgen, AstraZeneca PLC, Bristol Myers Squibb, GlaxoSmithKline plc, Merck & Co., Inc. Novartis AG, Pfizer, Roche Holding Ltd. and Sanofi SA. Many large and mid-sized biotech companies, including BeiGene, Incyte, Nektar, and Alkermes have ongoing efforts in cancer immunotherapy. Several companies, including Adagene, Amgen, Amunix, BioAtla, Halozyme, Harpoon Therapeutics, Revitope, Roche, Seagen, Takeda, Werewolf Therapeutics, and Xilio are exploring antibody masking and/or conditional activation strategies, which could compete with our Probody platform. We are also aware of several companies that are developing ADCs, such as AbbVie, ADC Therapeutics, Daiichi Sankyo, Gilead, ImmunoGen, Mersana Therapeutics, Pfizer, Roche Holding Ltd. Seagen and Takeda. Furthermore, several large pharmaceutical companies, including Amgen, Novartis AG and Roche Holding Ltd., are developing T-cell engaging immunotherapies, and we are aware of several mid-sized biotech companies, such as MacroGenics and Xencor, and small companies with ongoing efforts to develop T-cell engaging immunotherapies. Any of these companies may be well capitalized and may have significant clinical experience. In addition, these companies include our collaborators.

Many of our competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness 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 approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop less differentiated 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.

Any inability to attract and retain qualified key management and technical personnel would impair our ability to implement our business plan.

Our success largely depends on the continued service of key management, advisors and other specialized personnel, including Sean A. McCarthy, D.Phil., our chief executive officer and chairman, and Amy C. Peterson, M.D., our president and chief operating officer. The loss of one or more members of our management team or other key employees or advisors could delay our research and development programs and have a material and adverse effect on our business, financial condition, results of operations and prospects. The relationships that our key managers have cultivated within our industry make us particularly dependent upon their continued employment with us. We are dependent on the continued service of our technical personnel because of the highly technical nature of our product candidates and technologies and the specialized nature of the regulatory approval process. Because our management team and key employees are not obligated to provide us with continued service, they could terminate their employment with us at any time without penalty. In particular, as a result of the COVID-19 pandemic, the ability of employees to engage in a remote working environment has increased the competitive landscape across the country for us in seeking qualified employees. Employees are now able to consider opportunities across the country and it may be more difficult to hire employees. Furthermore, it is more difficult to engage employees in Company culture and build working rapport when they are working remotely. As a result, it may be more difficult to retain employees on a long-term basis. Our future success will depend in large part on our continued ability to attract and retain other highly qualified scientific, technical and management personnel, as well as personnel with expertise in clinical testing, manufacturing, governmental regulation and commercialization. We face competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations, especially as job opportunities in the biotechnology industry have recently increased significantly in the San Francisco Bay Area and across the country.

If any of our product candidates are approved for marketing and commercialization and we are unable to develop sales, marketing and distribution capabilities on our own or enter into agreements with third parties to perform these functions on acceptable terms, we will be unable to commercialize successfully any such future products.

We currently have no sales, marketing or distribution capabilities or experience. If any of our product candidates is approved, we will need to develop internal sales, marketing and distribution capabilities to commercialize such products, which would be expensive and time-consuming, or enter into collaborations with third parties to perform these services. If we decide to market our products directly, we will need to commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and supporting distribution, administration and compliance capabilities. If we rely on third parties with such capabilities to market our products or decide to co-promote products with collaborators, we will need to establish and maintain marketing and distribution arrangements with third parties, and there can be no assurance that we will be able to enter into such arrangements on acceptable terms or at all. In entering into third-party marketing or distribution arrangements, any revenue we receive will depend upon the efforts of the third parties and there can be no assurance that such third parties will establish adequate sales and distribution capabilities or be successful in gaining market acceptance of any approved product. If we are not successful in commercializing any product approved in the future, either on our own or through third parties, our business, financial condition, results of operations and prospects could be materially and adversely affected.

Price controls imposed in foreign markets may adversely affect our future profitability.

In some countries, particularly member states of the European Union, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we or future collaborators may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our Probody therapeutic candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of any product candidate approved for marketing is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business, financial condition, results of operations or prospects could be materially and adversely affected. We currently do not know how the exit of the United Kingdom from the European Union will affect the pricing of prescription drugs, either in the United Kingdom or in the remaining European Union member states.

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

We are exposed to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments, including as a result of the clinical testing of praluzatamab ravtansine (CX-2009), CX-2029, BMS-986249, BMS-986288,

pacmilimab (CX-072) and CX-904 and any of our other product candidates or those of our collaborators. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing product candidates, such claims could result in an FDA investigation of the safety and effectiveness of our product candidates, our manufacturing processes and facilities (or the manufacturing processes and facilities of our third-party manufacturers) or our marketing programs and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, 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. We currently have insurance that we believe is appropriate for our stage of development and may need to obtain higher levels of insurance prior to marketing any of our product candidates. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

We are exposed to the risk of fraud or other misconduct by our employees or independent contractors. Misconduct by these parties could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we may establish, comply with federal and state data privacy, security, fraud and abuse, and other healthcare laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a material and adverse effect on our business, financial condition, results of operations and prospects, including the imposition of significant fines or other sanctions.

Our current operations are concentrated in one location, and we or the third parties upon whom we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our current operations are located in our facilities in South San Francisco, California. Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemics, 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 or other natural disasters could further disrupt our operations and have a material and adverse effect on our business, financial condition, results of operations and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our research facilities or the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. For example, in March 2020, the COVID-19 pandemic caused us to restrict access to our facility and initiate a work-from-home program limiting onsite activity to a substantially reduced level of laboratory research activities. Although we have gradually increased levels of our laboratory research activities, we continue to operate in a hybrid, work-from-home environment and there can be no assurance that we will be able to continue to increase or maintain current levels of such activity or that the COVID-19 pandemic will not continue to impact our ability to conduct business.

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 and 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 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 reported financial results may be adversely affected by changes in accounting principles generally accepted in the U.S.

We prepare our financial statements in conformity with accounting principles generally accepted in the U.S. These accounting principles are subject to interpretation by the Financial Accounting Standards Board ("FASB") and the SEC. A change in these policies or interpretations could have a significant effect on our reported financial results, may retroactively affect previously reported results, could cause unexpected financial reporting fluctuations, and may require us to make costly changes to our operational processes and accounting systems. For example, in May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606),* which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU replaced most existing revenue recognition guidance in the U.S. GAAP when it became effective. The new standard was effective at the beginning of our fiscal year 2018 with early adoption permitted for our fiscal year 2017. We evaluated the impact of ASU 2014-09 on our financial statements and adoption of the standard had a significant impact on our financial statements and retroactively affected the accounting treatment of transactions completed before adoption. Additionally, for the purpose of revenue recognition, we are required to estimate research service periods as well as the related cost to completion, of our research development program. Such estimates are inherently uncertain and may result in changes in estimates to financial statements in subsequent periods.

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

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "IRC"), if a corporation undergoes an "ownership change" (generally defined as a greater than 50 percentage points change (by value) in the ownership of its equity over a rolling three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and certain other pre-change tax attributes to offset its post-change income and taxes may be limited. California has similar rules. For example, we performed an IRC Section 382 analysis in 2017 and determined there was an ownership change that resulted in Section 382 limitations. The ownership change limited our ability to utilize net operating losses against taxable income in 2018 for both federal and California tax purposes. The remaining net operating losses and credit will be available in future years before expiration during their respective carryforward periods. We may experience ownership changes in the future as a result of shifts in our stock ownership, some of which are outside our control, and our ability to utilize net operating loss carryforwards could be limited by an "ownership change" as described above, which could result in additional increased tax liability to the Company.

Risks Related to Intellectual Property

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

Our success depends in part on our ability to obtain and maintain patents and other forms of intellectual property rights, including in-licenses of intellectual property rights of others, for our product candidates, methods used to manufacture our product candidates and methods for treating patients using our product candidates, as well as our ability to preserve our trade secrets, to prevent third parties from infringing upon our proprietary rights and to operate without infringing upon the proprietary rights of others. We have a substantial number of issued patents and pending patent applications, some of which are co-owned with a third party, covering our Probody platforms and products as well as methods of use and production thereof; we have exclusively licensed UCSB's interest in the patent family co-owned with UCSB that covers Probody and other pro-protein technology in the fields of therapeutics, *in vivo* diagnostics and prophylactics. In addition, we have exclusively licensed a patent portfolio of three patent families from UCSB that includes patents and patent applications that cover compositions and methods related to the screening for and identification of the masks and protease-cleavable linkers that we incorporate into our Probody candidates. We may not be able to apply for patents on certain aspects of our product candidates in a timely fashion or at all. Our existing issued and granted patents and any future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing products and technology. There is no guarantee that any of our pending patent applications will result in issued or granted patents, that any of our issued or granted patents will not later be found to be invalid or unenforceable or that any issued or granted patents will include claims that are sufficiently broad to cover our product candidates or to provide meaningful protection from our competitors. Moreover, the patent position of biotechnology and biopharmaceutical companies can be highly uncertain because it involves complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our current and future proprietary technology and product candidates are covered by valid and enforceable patents or are effectively

maintained as trade secrets. If third parties disclose or misappropriate our proprietary rights, it may materially and adversely affect our position in the market.

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

In addition, there are numerous recent changes to the patent laws and proposed changes to the rules of the USPTO that may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. For example, the America Invents Act ("AIA") enacted within the last several years involves significant changes in patent legislation. The Supreme Court has ruled on several patent cases in recent years, some of which cases either narrow the scope of patent protection available in certain circumstances or weaken the rights of patent owners in certain situations. The recent decision by the Supreme Court in *Association for Molecular Pathology v. Myriad Genetics, Inc*. precludes a claim to a nucleic acid having a stated nucleotide sequence that is identical to a sequence found in nature and has not been modified. We currently are not aware of an immediate impact of this decision on our patents or patent applications because we are developing product candidates that contain modifications, such as our Probody substrates and masks, that we believe are not found in nature. However, this decision has yet to be clearly interpreted by courts and by the USPTO. We cannot assure you that the interpretations of this decision or subsequent rulings will not adversely impact our patents or patent applications. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

Once granted, patents may remain open to opposition, interference, re-examination, post-grant review, inter partes review, nullification or derivation action in court or before patent offices or similar proceedings for a given period after allowance or grant, during which time third parties can raise objections against such initial grant. In the course of such proceedings, which may continue for a protracted period of time, the patent owner may be compelled to limit the scope of the allowed or granted claims thus attacked, or may lose the allowed or granted claims altogether. In addition, there can be no assurance that:

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

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

Probody therapeutics are a relatively new scientific field. We have obtained grants and issuances of Probody therapeutic patents and have licensed one patent family comprising several of these patents from a third party on an exclusive basis for therapeutics applications. The issued patents and pending patent applications in the United States and in key markets around the world that we own or license claim many different methods, compositions and processes relating to the discovery, development, manufacture and commercialization of antibody and immunoregulatory therapeutics. Specifically, we own and have licensed a portfolio of patents, patent applications and other intellectual property covering Probody compositions of matter as well as their methods of manufacturing and use.

As the field of antibody and immunoregulatory therapeutics matures, patent applications are being processed by national patent offices around the world. There is uncertainty about which patents will issue, and, if they do, as to when, to whom, and with what claims. In addition, third parties may attempt to invalidate our intellectual property rights.

Even if our rights are not directly challenged, disputes could lead to the weakening of our intellectual property rights. Our defense against any attempt by third parties to circumvent or invalidate our intellectual property rights could be costly to us, could require significant time and attention of our management and could have a material and adverse effect on our business, financial condition, results of operations and prospects or our ability to successfully compete.

There are many issued and pending patents that claim aspects of our product candidates and modifications that we may need to apply to our product candidates. There are also many issued patents that claim antibodies or portions of antibodies that may be relevant for Probody products we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we may not be able to market products or perform research and development or other activities covered by these patents.

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

Obtaining a valid and enforceable issued or granted patent covering our technology in the U.S. and worldwide can be extremely costly. In jurisdictions where we have not obtained patent protection, competitors may use our technology to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but where it is more difficult to enforce a patent as compared to the U.S. Competitor products may compete with our future products in jurisdictions where we do not have issued or granted patents or where our issued or granted patent claims or other intellectual property rights are not sufficient to prevent competitor activities in these jurisdictions. The legal systems of certain countries, particularly certain developing countries, make it difficult to enforce patents and such countries may not recognize other types of intellectual property protection, particularly that relating to biopharmaceuticals. This could make it difficult for us to prevent the infringement of our patents or marketing of competing products in violation of our proprietary rights generally in certain jurisdictions. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

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

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws in the U.S., and many companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions. If we or our licensors encounter difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished and we may face additional competition from others in those jurisdictions. Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position in the relevant jurisdiction may be impaired and our business and results of operations may be adversely affected.

We or our licensors, or any future strategic partners may become subject to third party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights, and we may need to resort to litigation to protect or enforce our patents or other proprietary rights, all of which could be costly, time consuming, delay or prevent the development and commercialization of our product candidates, or put our patents and other proprietary rights at risk.

We or our licensors, or any future strategic partners may be subject to third-party claims for infringement or misappropriation of patent or other proprietary rights. We are generally obligated under our license or collaboration agreements to indemnify and hold harmless our licensors or collaborators for damages arising from intellectual property infringement by us. For example, in March 2020, Vytacera Bio, LLC filed a patent infringement lawsuit against the Company in the U.S. District Court for the District of Delaware. The lawsuit alleges that the Company's use, offers to sell, and/or sales of the Probody technology platform for basic research applications constitutes infringement. The complaint seeks unspecified monetary damages. The Company believes that the lawsuit is without merit and intends to vigorously defend itself. However, there can be no assurance that a court might not rule against us in these proceedings. Even if we are successful in defending against such claim, this litigation could divert management's attention, as well as our resources, from our business and any claims paid out of our cash reserves would harm our financial condition and operating results.

If we or our licensors, or any future strategic partners are found to infringe a third-party patent or other intellectual property rights, we could be required to pay damages, potentially including treble damages, if we are found to have willfully infringed. In addition, we or our licensors, or any future strategic partners may choose to seek, or be required to seek, a license from a third party, which may not be available on acceptable terms, if at all. Even if a license can be obtained on acceptable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us. If we fail to obtain a required license, we or our collaborators may be unable to effectively market product candidates based on our technology, which could limit our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. In addition, we may find it necessary to pursue claims or initiate lawsuits to protect or enforce our patent or other intellectual property rights. The cost to us in defending or initiating any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in our favor, could be substantial, and litigation would divert our management's attention. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and limit our ability to continue our operations.

If we were to initiate legal proceedings against a third party to enforce a patent covering one of our products or our technology, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the U.S., defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one or more of our products or certain aspects of our platform technology. Such a loss of patent protection could have a material and adverse effect on our business, financial condition, results of operations and prospects. Patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without legally infringing, misappropriating or otherwise violating our patents or other intellectual property rights.

Intellectual property rights of third parties could adversely affect our ability to commercialize our product candidates, and we might be required to litigate or obtain licenses from third parties in order to develop or market our product candidates. Such litigation or licenses could be costly or not available on commercially reasonable terms.

Because the antibody landscape is still evolving, including the masked antibody landscape, it is difficult to conclusively assess our freedom to operate without infringing on third-party rights. There are numerous companies that have pending patent applications and issued patents broadly covering antibodies generally or covering antibodies directed against the same targets as, or targets similar to, those we are pursuing. There are many issued patents and patent applications covering antibodies targeted against PD-1 and PD-L1, and the intellectual property covering PD-1 and PD-L1 antibodies has been the subject of litigation and licensing, especially regarding how broadly certain claims should be construed. If the claims were to be construed broadly by the courts, we may need to obtain a license to some of such intellectual property, covering PD-1 and/or PD-L1 antibodies, which would decrease the profits we would realize from the sale of such products. An increasing number of third parties are filing masked antibody patent applications, several of which contain claims that are patterned after our own patent claims. Our competitive position may suffer if patents issued to third parties or other third-party intellectual property rights cover our products or product candidates or elements thereof, or our manufacture or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize products or product candidates unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property

right concerned, or enter into a license agreement with the intellectual property right holder, if available on commercially reasonable terms. There may be issued patents of which we are not aware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by our Probody therapeutic technologies. There also may be pending patent applications of which we are not aware that may result in issued patents, which could be alleged to be infringed by our Probody therapeutic technologies. If such an infringement claim should be brought and be successful, we may be required to pay substantial damages, be forced to abandon our product candidates or seek a license from any patent holders. No assurances can be given that a license will be available on commercially reasonable terms, if at all.

It is also possible that we have failed to identify relevant third-party patents or applications. For example, U.S. applications filed before November 29, 2000, and certain U.S. applications filed after that date that will not be filed outside the U.S. remain confidential until patents issue. Patent applications in the U.S. and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products or platform technology could have been filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies, our products or the use of our products. Third-party intellectual property right holders may also actively bring infringement claims against us. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our products. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of our product candidates that are held to be infringing. We might, if possible, also be forced to redesign product candidates so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

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

Litigation, including the ongoing patent infringement lawsuit brought by Vytacera Bio, LLC ("Vytacera") against us, or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally 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. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon, misappropriating or otherwise violating or from successfully challenging our intellectual property rights. For example, although we believe the Vytacera lawsuit is without merit and we intend to vigorously defend ourselves, we cannot provide any assurance that we will be successful. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material and adverse effect on our ability to compete in the marketplace.

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 our rights to intellectual property rights that are necessary for developing and protecting our product candidates or we could lose certain rights to grant sublicenses.

Our licenses from Amgen, ImmunoGen and UCSB impose, and any future licenses we enter into are likely to impose, various development, commercialization, funding, diligence, sublicensing, insurance, patent prosecution and enforcement and/or other obligations on us, including various payment obligations such as milestone and royalty payments and payments based on sublicensing revenues. Our rights under our agreements with our licensors or collaborators may be limited or modified according to their terms. Additionally, 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 and collaborators 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, misappropriating or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty or sublicense revenue

payment obligations we would be required to pay on development or sales of future products, if any, the amounts may be significant. The amount of our future royalty or sublicense revenue payment 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.

Our intellectual property agreements with our licensors, collaborators and third parties may be subject to disagreements over contract interpretation, which could narrow the scope of, or result in termination of, our rights to the relevant intellectual property or technology or increase our financial or other obligations to such third parties.

Certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. For example, we may disagree with our licensors or collaborators regarding whether, when and to what extent various obligations under these agreements apply to certain of our product candidates and products, including various payment, development, commercialization, funding, diligence, sublicensing, insurance, patent prosecution and enforcement and/or other obligations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement. In either case, such disagreement could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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

In addition to seeking patent protection for certain aspects of our product candidates, we also consider trade secrets, including confidential and unpatented know-how, important to the maintenance of our competitive position. We protect trade secrets and confidential and unpatented know-how, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to maintain confidentiality and assign their inventions to us.

Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts in the U.S. and certain foreign jurisdictions are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

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

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

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

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Government Regulation

We may be unable to obtain or be delayed in obtaining U.S. or foreign regulatory approval and, as a result, be unable or delayed in being able to commercialize our product candidates.

Our product candidates that we are currently developing are regulated as therapeutic biologics that are subject to requirements for review and approval of a BLA by the FDA's Center for Drug Evaluation and Research ("CDER"). Therefore, our product candidates are subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, efficacy, approval, recordkeeping, reporting, labeling, storage, packaging, advertising and promotion, pricing, marketing and distribution of drugs and therapeutic biologics. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required to be successfully completed in the U.S. and in many foreign jurisdictions before a new drug or therapeutic biologic can be marketed. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. For example, at this time it is impossible to predict whether the COVID-19 pandemic will cause regulatory delays in the U.S. or foreign jurisdictions. It is possible that none of the product candidates we may develop will obtain the regulatory approvals necessary for us or our existing or future collaborators to begin selling them.

As a company, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when regulating us require judgment and can change, which makes it difficult to predict with certainty how they will be applied. Any analysis we perform of data from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unexpected delays or increased costs due to new government regulations, for example, from future legislation or administrative action, or from changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Further, government shutdowns, such as the partial U.S. federal government shutdown in late 2018 or the United Kingdom's departure from the European Union may impact our ability to access government agencies in a timely manner or otherwise impact our ability to move our product candidates through the regulatory process. It is impossible to predict whether legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be.

Moreover, the FDA may respond to our submissions by defining requirements we may not have anticipated. Such responses could lead to significant delays in the clinical development of our product candidates. In addition, because there may be approved treatments for some of the diseases for which we may seek approval, in order to receive regulatory approval, we may need to demonstrate through clinical trials that the product candidates we develop to treat these diseases, if any, are not only safe and effective, but safer or more effective than existing products. Furthermore, in recent years, there has been increased public and political pressure on the FDA with respect to the approval process for new drugs and therapeutic biologics, and the FDA's standards, especially regarding product safety, appear to have become more stringent.

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

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries and may include all of the risks associated with FDA approval described above as well as risks attributable to the

satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval. Approval by the FDA does not ensure approval by regulatory authorities outside the U.S. and vice versa.

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

Any regulatory approvals that we or our collaborators obtain for our product candidates may also be subject to limitations on the approved indicated uses for which a product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including "Phase 4" clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, import, export, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and good clinical practices for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, 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, among other things:

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

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

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. 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 be subject to enforcement action, and we may not achieve or sustain profitability.

Our product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The Affordable Care Act includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 ("BPCIA"), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a highly similar or "biosimilar" product may not be submitted to the FDA until four years following the date that the reference product was first approved 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 approved. 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.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates 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. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of

our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

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

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for therapeutic biologics or modifications to approved therapeutic biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, in March 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. Subsequently, in July 2020, the FDA resumed certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA utilized this risk-based assessment system to assist in determining when and where it was the safest to conduct prioritized domestic inspections. 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, among other facilities. According to the guidance, the FDA may request such remote interactive evaluations where the FDA determines that remote evaluation would be appropriate based on mission needs and travel limitations. In May 2021, the FDA outlined a detailed plan to move toward a more consistent state of inspectional operations, and in July 2021, the FDA resumed standard inspectional operations of domestic facilities and was continuing to maintain this level of operation as of September 2021. More recently, the FDA has continued to monitor and implement changes to its inspectional activities to ensure the safety of its employees and those of the firms it regulates as it adapts to the evolving COVID-19 pandemic. 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.

Healthcare legislative reform measures may have a material and adverse effect on our business and results of operations.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (together, the "ACA"), was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The ACA, among other things, subjected therapeutic biologics to potential competition by lower-cost biosimilars, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs and therapeutic biologics that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs and therapeutic biologics, and created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts, which, through subsequent legislative amendments, was increased to 70% starting in 2019, off negotiated prices of applicable brand drugs and therapeutic biologics to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs and therapeutic biologics to be covered under Medicare Part D.

Since its enactment, there have been judicial, executive and Congressional challenges to certain aspects of the ACA. 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 issued an executive order initiating 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. It is unclear how healthcare reform measures enacted by Congress or implemented by the Biden administration, if any, will impact our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted to reduce healthcare expenditures. The Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 2, 2020 through March 31, 2022, unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. If federal spending is further reduced, anticipated budgetary shortfalls may also impact the ability of relevant agencies, such as the FDA or the National Institutes of Health to continue to function at current levels. Amounts allocated to federal grants and contracts may be reduced or eliminated. These reductions may also impact the ability of relevant agencies to timely review and approve research and development, manufacturing, and marketing activities, which may delay our ability to develop, market and sell any products we may develop.

Moreover, payment methodologies, including payment for companion diagnostics, may be subject to changes in healthcare legislation and regulatory initiatives. For example, in March 2018, the Centers for Medicare & Medicaid Services ("CMS") finalized a national coverage determination extending coverage under the Medicare program for certain diagnostic laboratory tests using next generation sequencing ("NGS") that are approved by the FDA as a companion *in vitro* diagnostic and used in a cancer with an FDA-approved companion diagnostic indication. Under the national coverage determination, diagnostic tests that meet these criteria are covered only in patients with recurrent, metastatic, relapsed, refractory or stages III or IV cancer if the test has an FDA-approved or cleared indication for use in that patient's cancer and results are provided to the treating physician for management of the patient using a report template to specify treatment options. Although the Medicare program increasingly is used as a model for how private payors and other governmental payors develop their coverage and reimbursement policies, it is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for any companion diagnostics associated with our product candidates.

In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. For example, the 21st Century Cures Act changed the reimbursement methodology for infusion drugs and biologics furnished through durable medical equipment in an attempt to remedy over- and underpayment of certain products. Furthermore, the Build Back Better Act, if enacted, would introduce substantial drug pricing reforms, including the establishment of a drug price negotiation program within the U.S. Department of Health and Human Services that would require manufacturers to charge a negotiated "maximum fair price" for certain selected drugs or pay an excise tax for noncompliance, and the establishment of rebate payment requirements on manufacturers of certain drugs payable under Medicare Parts B and D. If the Build Back Better Act is not enacted, similar or other drug pricing proposals could appear in future legislation. Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. 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. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or companion diagnostics or additional pricing pressures.

If we or our collaborators, manufacturers or service providers fail to comply with healthcare laws and regulations, we or they could be subject to enforcement actions, which could affect our ability to develop, market and sell our products and may harm our reputation.

Although we do not currently have any products on the market, if and when we begin commercializing our product candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our product candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind to induce or reward either the referral of an individual for, or the purchase, or order or recommendation of, any good or service, for which

payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal False Claims Act, which imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- the U.S. federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. federal legislation commonly referred to as Physician Payments Sunshine Act, enacted as part of the ACA, and its implementing regulations, which requires certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to the CMS information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives) and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members; and
- analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug and therapeutic biologics manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures and pricing information.

Ensuring that our future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any such requirements, we may be subject to penalties, including civil or criminal penalties, monetary damages, the curtailment or restructuring of our operations, loss of eligibility to obtain approvals from the FDA, or exclusion from participation in government contracting, healthcare reimbursement or other government programs, including Medicare and Medicaid, any of which could adversely our financial results. Although effective compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, these risks cannot be entirely eliminated. Any action against us for an alleged or suspected violation could cause us to incur significant legal expenses and could divert our management's attention from the operation of our business, even if our defense is successful. In addition, achieving and sustaining compliance with applicable laws and regulations may be costly to us in terms of money, time and resources.

If we or future collaborators, manufacturers or service providers fail to comply with applicable federal, state or foreign laws or regulations, we could be subject to enforcement actions, which could affect our ability to develop, market and sell our products successfully and could harm our reputation and lead to reduced acceptance of our products by the market. These enforcement actions include, among others:

- adverse regulatory inspection findings;
- warning letters;
- voluntary or mandatory product recalls or public notification or medical product safety alerts to healthcare professionals;
- restrictions on, or prohibitions against, marketing our products;
- restrictions on, or prohibitions against, importation or exportation of our products;
- suspension of review or refusal to approve pending applications or supplements to approved applications;
- exclusion from participation in government-funded healthcare programs;

- exclusion from eligibility for the award of government contracts for our products;
- suspension or withdrawal of product approvals;
- seizures or administrative detention of products;
- injunctions; and
- civil and criminal penalties and fines.

If we fail to comply with U.S. and foreign regulatory requirements, regulatory authorities could limit or withdraw any marketing or commercialization approvals we may receive and subject us to other penalties that could materially harm our business.

Even if we receive marketing and commercialization approval of a product candidate, we will be subject to continuing regulatory requirements, including in relation to adverse patient experiences with the product and clinical results that are reported after a product is made commercially available, both in the U.S. and any foreign jurisdiction in which we seek regulatory approval. The FDA has significant post-market authority, including the authority to require labeling changes based on new safety information and to require post-market studies or clinical trials to evaluate safety risks related to the use of a product or to require withdrawal of the product from the market. The FDA also has the authority to require a REMS plan after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug or therapeutic biologic. The manufacturer and manufacturing facilities we use to make a future product, if any, will also be subject to periodic review and inspection by the FDA and other regulatory agencies, including for continued compliance with cGMP requirements. The discovery of any new or previously unknown problems with our third-party manufacturers, manufacturing processes or facilities may result in restrictions on the product, manufacturer or facility, including withdrawal of the product from the market. If we rely on third-party manufacturers, we will not have control over compliance with applicable rules and regulations by such manufacturers. Any product promotion and advertising will also be subject to regulatory requirements and continuing regulatory review. If we or our collaborators, manufacturers or service providers fail to comply with applicable continuing regulatory requirements in the U.S. or foreign jurisdictions in which we seek to market our products, we or they may be subject to, among other things, fines, warning letters, holds on clinical trials, delay of approval or refusal by the FDA to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, administrative detention of products, refusal to permit the import or export of products, operating restrictions, injunction, civil penalties and criminal prosecution.

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

The regulatory environment surrounding data privacy and security is increasingly demanding. We are or may in the future be subject to numerous U.S. federal and state laws and non-U.S. regulations governing the collection, use, disclosure, retention, and security of personal and confidential information of our clinical subjects, clinical investigators, employees and vendors/business contacts. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business. This evolution may create uncertainty in our business, affect our ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us to comply with federal, state or foreign laws or regulations, our internal policies and procedures or our contracts governing our processing of personal information could result in negative publicity, government investigations and enforcement actions, claims by third parties and damage to our reputation, any of which could have a material adverse effect on our business, results of operation, and financial condition.

In the United States, HIPAA imposes, among other things, certain standards relating to the privacy, security, transmission and breach reporting of individually identifiable health information. We may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA. Depending on the facts and circumstances, we could be subject to significant penalties if we violate HIPAA. Certain states have also adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. For example, the California Consumer Privacy Act ("CCPA") went into effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers, including the expanded right to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA 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. Further, the California Privacy Rights Act ("CPRA") recently passed in California. The CPRA significantly amends the CCPA and 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. Similar laws have passed in Virginia and Colorado, and have been proposed in other states and at the federal level, reflecting a trend toward more stringent privacy legislation in the United States. The enactment of such laws could have potentially conflicting requirements that would make compliance challenging. 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.

Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. For example, the GDPR went into effect in May 2018, and imposes stringent requirements for processing the personal data of individuals within 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 4% total worldwide annual turnover or €20 million, whichever is higher. 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; in July 2020, the Court of Justice of the European Union ("CJEU") limited how organizations could lawfully transfer personal data from the EU/EEA to the United States by invalidating the EU-US Privacy Shield Framework for purposes of international transfers and imposing further restrictions on the use of standard contractual clauses ("SCCs"). The European Commission issued revised SCCs on June 4, 2021 to account for the decision of the CJEU and recommendations made by the European Data Protection Board. The revised SCCs must be used for relevant new data transfers from September 27, 2021; existing standard contractual clauses arrangements must be migrated to the revised clauses by December 27, 2022. The new SCCs apply only to the transfer of personal data outside of the EEA and not the United Kingdom; the United Kingdom's Information Commissioner's Office launched a public consultation on its draft revised data transfers mechanisms in August 2021. There is some uncertainty around whether the revised clauses can be used for all types of data transfers, particularly whether they can be relied on for data transfers to non-EEA entities subject to the GDPR. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the standard contractual clauses cannot be used, or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our products and services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results.

Further, from January 1, 2021, we have had to comply with the GDPR and also the UK GDPR, which, together with the amended UK Data Protection Act 2018, retains the GDPR in UK 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 European Union in relation to certain aspects of data protection law remains unclear, including how data transfers between European Union member states and the United Kingdom will be treated. These changes may lead to additional compliance costs and could increase our overall risk. The European Commission has adopted an adequacy decision in favor of the United Kingdom, enabling data transfers from EU member states to the United Kingdom without additional safeguards. However, the UK adequacy decision will automatically expire in June 2025 unless the European Commission re-assesses and renews or extends that decision.

In recent years, U.S. and European lawmakers and regulators have expressed concern over electronic marketing and the use of third-party cookies, web beacons and similar technology for online behavioral advertising. In the European Union, the rules on e-marketing are currently set out in the ePrivacy Directive, which will be replaced by a new ePrivacy Regulation. While the ePrivacy Regulation was originally intended to be adopted on May 25, 2018 (alongside the GDPR), it is still going through the European legislative process. The current draft of the ePrivacy Regulation imposes strict opt-in e-marketing rules with limited exceptions for business to business communications, and significantly increases fines for non-compliance. Regulation of cookies and web beacons may lead to broader restrictions on our online activities, including our efforts to understand our users' internet usage and promote ourselves to them.

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 significant fines, penalties and damage to our reputation, and we may be forced to change the way we operate. This could result in additional cost and liability to us, which could negatively affect our business, results of operation, and financial condition.

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

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

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and reimbursement for these products and related treatments will be available from government authorities, private health insurers and other organizations. Even if we succeed in bringing one or more products to the market, these products may not be considered cost-effective, and the amount reimbursed for any products may be insufficient to allow us to sell our products on a competitive basis. Because our programs are in the early stages of development, we are unable at this time to determine their cost effectiveness or the likely level or method of reimbursement. Increasingly, the third-party payors who reimburse patients or healthcare providers, such as government and private insurance plans, are requiring that drug companies provide them with predetermined discounts from list prices, and are seeking to reduce the prices charged or the amounts reimbursed for biopharmaceutical products. If the price we are able to charge for any products we develop, or the reimbursement provided for such products, is inadequate in light of our development and other costs, our return on investment could be adversely affected. There may be significant delays in obtaining reimbursement for newly-approved drugs or therapeutic biologics, and coverage may be more limited than the purposes for which the drug or therapeutic biologic is approved by the FDA or similar regulatory authorities outside of the United States. Moreover, eligibility for reimbursement does not imply that any drug or therapeutic biologic will be reimbursed in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs or therapeutic biologics, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may be based on payments allowed for lower-cost drugs or therapeutic biologics that are already reimbursed, may be incorporated into existing payments for other services and may reflect budgetary constraints or imperfections in Medicare data. Net prices for drugs or therapeutic biologics may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs or therapeutic biologics from countries where they may be sold at lower prices than in the U.S. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for new drugs or therapeutic biologics that we develop and for which we obtain regulatory approval could have a material and adverse effect on our operating results, our ability to raise capital needed to commercialize products and our financial condition.

We may seek and fail to obtain fast track or breakthrough therapy designations for our current or future product candidates. If we are successful, these programs may not lead to a faster development or regulatory review process, and they do not guarantee we will receive approval for any product candidate. We may also seek to obtain accelerated approval for one or more of our product candidates but the FDA may disagree that we have met the requirements for such approval.

If a product is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product sponsor may apply for fast track designation. Fast track designation provides increased opportunities for sponsor meetings with the FDA during preclinical and clinical development, in addition to the potential for rolling review of a BLA, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure you 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 approval compared to conventional FDA procedures. The FDA may rescind the fast track designation if it believes that the designation is no longer supported by data from our clinical development program.

We may also seek breakthrough therapy designation for any product candidate that we develop. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Like fast track designation, breakthrough therapy designation is within the discretion of the FDA. Accordingly, even if we believe a product candidate we develop 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 breakthrough therapy designation for a product candidate may not result in a faster

development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if a product candidate we develop qualifies as a breakthrough therapy, the FDA may later decide that the drug no longer meets the conditions for qualification and rescind the designation.

Product candidates may also be eligible for accelerated approval if the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies or if such studies fail to verify the predicted clinical benefit. In addition, the FDA requires pre-approval of promotional materials for accelerated approval products, once approved. We cannot guarantee that the FDA will agree any of our product candidates has met the criteria to receive accelerated approval, which would require us to conduct additional clinical testing prior to seeking FDA approval. Even if any of our product candidates received approval through this pathway, the product may fail required post-approval confirmatory clinical trials, and we may be required to remove the product from the market or amend the product label in a way that adversely impacts its marketing.

We may seek Orphan Drug Designation for some of our product candidates, and we may be unsuccessful or may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for market exclusivity.

As part of our business strategy, we may seek Orphan Drug Designation for our product candidates, and we may be unsuccessful. Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs and therapeutic biologics for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug or therapeutic biologic as an orphan drug if it is a drug or therapeutic biologic intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or therapeutic biologic will be recovered from sales in the United States. In the United States, Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding toward clinical trial costs, tax advantages and user-fee waivers. In addition, 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 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 where the manufacturer is unable to assure sufficient product quantity.

Even if we obtain Orphan Drug Designation for our product candidates in specific indications, we may not be the first to obtain marketing approval of these product candidates for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or 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. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different biologics can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug or therapeutic biologic for the same condition if the FDA concludes that the later drug or therapeutic biologic is safer, more effective or makes a major contribution to patient care. Orphan Drug Designation neither shortens the development time or regulatory review time of a drug or therapeutic biologic nor gives the drug or therapeutic biologic any advantage in the regulatory review or approval process. In addition, while we may seek Orphan Drug Designation for our product candidates, we may never receive such designations.

Tax reform legislation passed in 2017 reduced the amount of the qualified clinical research costs for a designated orphan product that a sponsor may claim as a credit from 50% to 25%. Thus, further limiting the advantage and may impact our future business strategy of seeking the Orphan Drug Designation.

Risks Related to Ownership of Our Common Stock

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

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

- variations in the level of expense related to the ongoing development of our Probody platform, our product candidates or future development programs;
- results of clinical trials, or the addition or termination of clinical trials or funding support by us, or existing or future collaborators or licensing partners;
- our execution of any additional collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under existing or future arrangements or the termination or modification of any such existing or future arrangements;
- developments or disputes concerning patents or other proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our products;
- any intellectual property infringement lawsuit or opposition, interference or cancellation proceeding in which we may become involved, including the ongoing patent infringement lawsuit brought by Vytacera against us;
- 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 approval, the terms of such approval 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 quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Our stock price may be volatile and purchasers of our common stock could incur substantial losses.

Our stock price is volatile. Since our initial public offering ("IPO"), our stock had low and high sales prices in the range of $3.60 and $35.00 per share. The market price for our common stock may be influenced by many factors, including the other risks described in this section titled "Risk Factors" and the following:

- results of clinical trials and preclinical studies of our product candidates, or those of our competitors or our 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, clinical studies, manufacturing process or sales and marketing terms;
- the extent to which the COVID-19 pandemic and related governmental regulations and restrictions may impact our business, including our research, clinical trials, manufacturing and financial condition, as well as the impact of other pandemics, natural disasters and other calamities;
- 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 existing or 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 or our stockholders;
- the concentrated ownership of our common stock;
- changes in accounting principles;
- terrorist acts, acts of war or periods of widespread civil unrest;
- natural disasters and other calamities; and
- general economic, industry and market conditions.

The stock markets in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme volatility, including as a result of the COVID-19 pandemic, 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.

In addition, the spread of COVID-19 may negatively impact the trading price of shares of our common stock and could further severely impact our ability to raise additional capital on a timely basis or at all.

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

We may choose to raise additional capital in the future, depending on market conditions, strategic considerations and operational requirements. To the extent that additional capital is raised through the issuance of shares or other securities convertible into shares, our stockholders will be diluted. On February 27, 2020, we entered into an Open Market Sale Agreement (the "Sales Agreement") with Jefferies LLC ("Jefferies"), to sell shares of our common stock, par value $0.00001 per share, with aggregate gross sales proceeds of up to $75,000,000, from time to time, through an at the market offering under which Jefferies will act as sales agent. We have issued securities under the Sales Agreement and may do so in the future. In addition, in January and February 2021, we sold 16,428,571 shares of our common stock at $7.00 per share in an underwritten public offering. Future issuances of our common stock or other equity securities pursuant to the Sales Agreement or otherwise, 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. 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.

The employment agreements with our executive officers may require us to pay severance benefits to officers in connection with termination of employment or upon a change of control of us, which could harm our financial condition.

Each of our executive officers is entitled to receive a lump sum payment equal to one year or more of his or her base salary as well as continued medical and dental coverage for a period of one year or more plus a prorated portion of his or her target annual bonus for the calendar year in which his or her employment is terminated following his or her termination of employment due to good reason or without cause. In the event of a change in control and a termination of employment without cause or due to good reason, each of our executive officers would similarly receive one year or more of his or her base salary as well as continued medical and dental coverage for a period of one year or more, as well as an additional lump sum payment equal to 100% or more of his or her target annual bonus for the calendar year in which his or her employment is terminated and full vesting of his or her outstanding option awards. The accelerated vesting of options could result in dilution to our existing stockholders and harm the market price of our common stock. Furthermore, the payment of these severance benefits could harm our financial condition. In addition, these potential severance payments may discourage or prevent third parties from seeking a business combination with us.

An active market for our common stock may not be maintained.

Prior to our IPO in October 2015, there had been no public market for shares of our common stock. Our stock began trading on the Nasdaq Global Select Market in 2015, and we can provide no assurance that we will be able to maintain an active trading market on The Nasdaq Global Select Market or any other exchange in the future. If an active market for our common stock is not maintained, it may be difficult for our stockholders to sell shares without depressing the market price for the shares or at all. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other businesses, applications or technologies using our shares as consideration.

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.

As of December 31, 2021, our executive officers, directors, holders of 5% or more of our capital stock based on publicly available filings made with the SEC and their respective affiliates beneficially owned approximately 39% of our outstanding common stock. Therefore, these stockholders have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that our stockholders may feel are in their best interest.

Anti-takeover provisions in our charter documents 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 our amended and restated certificate of incorporation and our amended and restated bylaws 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, which our company is not obligated to call more than once per calendar year, be called only by the chairman of our board of directors, our chief executive officer, our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors, or, subject to certain conditions, by our secretary at the request of the stockholders holding of record, in the aggregate, shares entitled to cast not less than ten percent of the votes at a meeting of the stockholders (assuming all shares entitled to vote at such meeting were present and voted);
- advance notice requirements for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings;
- 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 percent 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 percent 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 incur increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, we incur significant legal, accounting and other expenses. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The Nasdaq Global Select Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors. 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.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 in a timely manner or with adequate compliance, we may be subject to sanctions by regulatory authorities.

Section 404 of the Sarbanes-Oxley Act of 2002 requires that we evaluate and determine the effectiveness of our internal controls over financial reporting and provide a management report on the internal control over financial reporting. If we have a material weakness in our internal controls over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We evaluate our internal controls systems to allow management to report on the effectiveness of the operation of our internal controls.

However, if we are not able to comply with the requirements of Section 404, or if we or our independent registered public accounting firm identify deficiencies in our internal controls that are deemed to be material weaknesses, we could be subject to sanctions or investigations by The Nasdaq Global Select Market, the SEC or other regulatory authorities, which would entail expenditure of additional financial and management resources and could materially adversely affect our stock price. Deficient internal controls could also cause us to fail to meet our reporting obligations or cause investors to lose confidence in our reported financial information, which could have a negative effect on our stock price.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

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. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We may incur significant costs from class action litigation due to our expected stock volatility.

Our stock price may fluctuate for many reasons, including as a result of public announcements regarding the progress of our development efforts or the development efforts of future collaborators or competitors, the addition or departure of our key personnel, variations in our quarterly operating results and changes in market valuations of biopharmaceutical and biotechnology companies.

This risk is especially relevant to us because biopharmaceutical and biotechnology companies have experienced significant stock price volatility in recent years. When the market price of a stock has been volatile as our stock price may be, holders of that stock have occasionally brought securities class action litigation against the company that issued the stock. For example, in May 2020, a putative securities class action lawsuit was brought against us (“Class Action Lawsuit”). While the Class Action Lawsuit was voluntarily dismissed without prejudice by the plaintiff and his attorneys in January 2021, a similar lawsuit or another lawsuit could be filed in the

future. Stockholder lawsuits of this type against us, even if it is without merit, could cause us to incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management.

Our amended and restated bylaws 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 bylaws provide that, subject to limited exceptions, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, 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, any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, as amended, our amended and restated certificate of incorporation or our amended and restated bylaws, any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws or any other action asserting a claim against us that is governed by the internal affairs doctrine. 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 described above. 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 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.

General Risk Factors

We may acquire assets or form strategic alliances in the future, and we may not realize the benefits of such acquisitions.

As we continue to mature our Probody platform and our clinical stage pipeline, we may seek to acquire and/or in-license other oncology products, product candidates, programs or companies that we consider complimentary to our efforts. Such efforts may never result in a transaction and any future growth through acquisition or in-licensing will depend upon the availability of suitable products, product candidates, programs or companies for acquisition or in-licensing on acceptable prices, terms and conditions. Even if appropriate opportunities are available, we may not be able to acquire rights to them on acceptable terms, or at all. The competition to acquire or in-license rights to promising products, product candidates, programs and companies is fierce, and many of our competitors are large, multinational pharmaceutical and biotechnology companies with considerably more financial, development and commercialization resources, personnel, and experience than we have. In order to compete successfully in the current business climate, we may have to pay higher prices for assets than may have been paid historically, which may make it more difficult for us to realize an adequate return on any acquisition. In addition, even if we succeed in identifying promising products, product candidates, programs or companies, we may not have the ability to develop, obtain regulatory approval for and commercialize such opportunities, or the financial resources necessary to pursue them.

Even if we are able to successfully identify and acquire or in-license new products, product candidates, programs or companies, we may not be able to successfully manage the risks associated with integrating any products, product candidates, programs or companies into our business or the risks arising from anticipated and unanticipated problems in connection with an acquisition or in-licensing. Further, while we seek to mitigate risks and liabilities of potential acquisitions through, among other things, due diligence, there may be risks and liabilities that such due diligence efforts fail to discover, that are not disclosed to us, or that we inadequately assess. Any failure in identifying and managing these risks and uncertainties effectively would have a material adverse effect on our business. In any event, we may not be able to realize the anticipated benefits of any acquisition or in-licensing for a variety of reasons, including the possibility that a product candidate fails to advance to clinical development, proves not to be safe or effective in clinical trials, or fails to reach its forecasted commercial potential or that the integration of a product, product candidate, program or company gives rise to unforeseen difficulties and expenditures. Any failure in identifying and managing these risks and uncertainties would have a material adverse effect on our business.

In addition, acquisitions create other uncertainties and risks, particularly when the acquisition takes the form of a merger or other business consolidation. We may encounter unexpected difficulties, or incur unexpected costs, in connection with transition activities and integration efforts, which include:

- high acquisition costs;
- the need to incur substantial debt or engage in dilutive issuances of equity securities to pay for acquisitions;
- the potential disruption of our historical business and our activities under our collaboration agreements;

- the strain on, and need to expand, our existing operational, technical, financial and administrative infrastructure;
- our lack of experience in late-stage product development and commercialization;
- the difficulties in assimilating employees and corporate cultures;
- the difficulties in hiring qualified personnel and establishing necessary development and/or commercialization capabilities;
- the failure to retain key management and other personnel;
- the challenges in controlling additional costs and expenses in connection with and as a result of the acquisition;
- the need to write down assets or recognize impairment charges;
- the diversion of our management's attention to integration of operations and corporate and administrative infrastructures; and
- any unanticipated liabilities for activities of or related to the acquired business or its operations, products or product candidates.

If we fail to integrate or otherwise manage an acquired business successfully and in a timely manner, resulting operating inefficiencies could increase our costs more than we planned, could negatively impact the market price of our common stock and could otherwise distract us from execution of our strategy. Failure to maintain effective financial controls and reporting systems and procedures could also impact our ability to produce timely and accurate financial statements.

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

Our future growth may depend, in part, on our ability to develop and commercialize our product candidates in foreign markets for which we may rely on collaboration with third parties. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the applicable regulatory authority in that foreign market, and we may never receive such regulatory approval for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our product candidates, and we cannot predict success in these jurisdictions. If we obtain approval of our product candidates and ultimately commercialize our product candidates in foreign markets, we would be subject to the risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and the reduced protection of intellectual property rights in some foreign countries. We may need to rely on third parties to market, distribute and sell our products in foreign markets.

Our information technology systems, or those of our CROs or other contractors or consultants we may utilize, may fail, suffer disruptions or suffer security breaches, which could result in a material disruption of our product development programs.

We are increasingly dependent on information technology systems and infrastructure, including mobile technologies, to operate our business. In the ordinary course of our business, we collect and store confidential and sensitive electronic information on our networks and in our data centers. This information includes, among other things, our intellectual property and proprietary information, the confidential information of our collaborators and licensees, and the personally identifiable information of our employees. It is important to our operations and business strategy that this electronic information remains secure and is perceived to be secure. Our information technology and other internal infrastructure systems and those of our CROs and contractors and consultants are vulnerable to damage and interruption from computer viruses, unauthorized access, natural disasters, terrorism, war, telecommunication and electrical failures, hacking, cyberattacks, phishing attacks and other social engineering schemes, malicious code, employee theft or misuse, human error, fraud, denial or degradation of service attacks, sophisticated nation-state and nation-state-supported actors or unauthorized access or use by persons inside our organization, or persons with access to systems inside our organization. A system interruption or security breach that leads to disclosure or modification of or prevents access to personally identifiable information or other protected information could harm our reputation, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, require us to verify the correctness of database contents and otherwise subject us to liability under laws and regulations that protect personal data, resulting in increased costs or loss of revenue. Similarly, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data.

Attacks upon information technology systems are also increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives and expertise. As a result

of the COVID-19 pandemic and resulting shelter-in-place and stay-at-home restrictions, we may also face increased cybersecurity risks due to our dependency on remote working technology and electronic monitoring of clinical trial sites, which may create additional opportunities for cybercriminals to exploit vulnerabilities. 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. 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 incur liability, recovery of our data could take a prolonged period of time, and the development of our research or product candidates could be delayed.

As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. While we have implemented security measures to protect our data security and information technology systems, such measures may not prevent such events. Significant disruptions of our information technology systems or breaches of data security could have a material adverse effect on our business, financial condition and results of operations.

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

Our research and development activities involve the use of hazardous materials and various chemicals. We maintain quantities of various flammable and toxic chemicals in our facilities in South San Francisco, California that are required for our research and development activities. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. We believe our procedures for storing, handling and disposing these materials in our South San Francisco facilities comply with the relevant guidelines of South San Francisco, the state of California and the Occupational Safety and Health Administration of the U.S. Department of Labor. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of animals and biohazardous materials. Although we maintain workers' compensation insurance to cover us for costs and expenses, we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

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

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our business and financial condition. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act (the "Tax Act"), enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to the Tax Act may affect us, and certain aspects of the Tax Act could be repealed or modified in future legislation. Changes in applicable tax rules, including changes to corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges, and could increase our future tax expense.

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

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our target studies and 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.

Item 1B. ***Unresolved Staff Comments***

None

Item 2. ***Properties***

Our principal executive office is currently located in South San Francisco, California, and consists of approximately 76,000 square feet of office and research and development space, all of which is located in a single building, under a lease that expires in October 2026. We believe that our existing facilities are sufficient for our current needs.

Item 3. Legal Proceedings

On March 4, 2020, Vytacera Bio, LLC filed a patent infringement lawsuit against us in the U.S. District Court for the District of Delaware. The lawsuit alleges that our use, offers to sell, and/or sales of the Probody® technology platform for basic research applications constitutes infringement. The complaint seeks unspecified monetary damages. We filed an Answer, Affirmative Defenses, and Counterclaims on May 26, 2020. Vytacera Bio, LLC filed its Answer to CytomX Therapeutics Inc.'s Counterclaims on June 5, 2020. On October 13, 2021, the Court granted the parties' stipulation to stay all pending case deadlines except for certain matters. All case deadlines are stayed until the Court resolves the parties' claim construction disputes. We believe that the lawsuit is without merit and intend to vigorously defend ourselves. Accordingly, we cannot reasonably estimate any range of potential future charges, and we have not recorded any accrual for a contingent liability associated with these legal proceedings.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. *Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities*

Market Information for Common Stock

Our common stock has been listed on the Nasdaq Global Select Market under the symbol "CTMX" since our initial public offering in October 2015. Prior to that time, there was no public market for our common stock.

Holders of Record

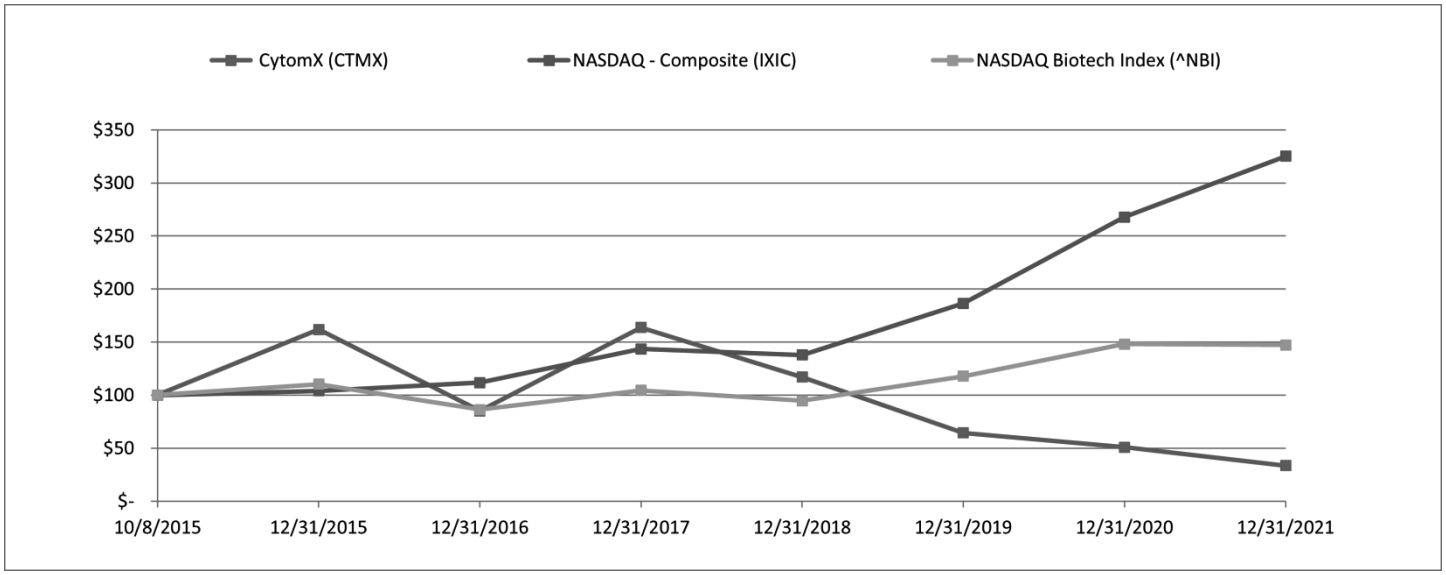
As of January 31, 2022, there were approximately 26 stockholders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividend Policy

We currently intend to retain future earnings, if any, for use in operation of our business and to fund future growth. We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

Stock Performance Graph

The following graph shows the total stockholder's return on an investment of $100 in cash at market close on October 8, 2015 (the first day of trading of our common stock), through December 31, 2021 for (i) our common stock, (ii) the Nasdaq Composite Index and (iii) the Nasdaq Biotechnology Index. Pursuant to applicable Securities and Exchange Commission rules, all values assume reinvestment of pre-tax amount of all dividends; however, no dividends have been declared on our common stock to date. The stockholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder return. This graph shall not be deemed "soliciting material" or be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 as amended (the "Exchange Act"), or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act of 1933, as amended (the "Securities Act"), whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



$100 investment in stock or index	October 8, 2015	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021
CytomX (CTMX)	$ 100.00	$ 161.78	$ 85.19	$ 163.64	$ 117.05	$ 64.42	$ 50.78	$ 33.57
Nasdaq Composite Index (IXIC)	$ 100.00	$ 104.09	$ 111.90	$ 143.50	$ 137.92	$ 186.51	$ 267.90	$ 325.21
Nasdaq Biotech Index (^NBI)	$ 100.00	$ 110.25	$ 86.34	$ 104.52	$ 94.77	$ 117.91	$ 148.19	$ 147.25

Securities Authorized for Issuance Under Equity Compensation Plans

The information required by this Item regarding equity compensation plans is incorporated by reference to the information set forth in PART III. Item 12 of this Annual Report on Form 10-K.

Use of Proceeds from Registered Securities

None.

Recent Sales of Unregistered Equity Securities

None.

Issuer Purchases of Equity Securities

None.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the attached financial statements and notes thereto. This Annual Report on Form 10-K, including the following sections, contains forward-looking statements within the meaning of the federal securities laws. These statements are subject to risks and uncertainties that could cause actual results and events to differ materially from those expressed or implied by such forward-looking statements. For a detailed discussion of these risks and uncertainties, see the "Risk Factors" section in Item 1A of this Annual Report on Form 10-K. We caution the reader not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date of this Form 10-K. We undertake no obligation to update forward-looking statements, which reflect events or circumstances occurring after the date of this Form 10-K.

For a discussion related to the results of operations for 2020 compared to 2019, refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Comparison of Years Ended December 31, 2020 and 2019" in our Annual Report on Form 10-K for the year ended December 31, 2020 filed with the SEC on February 24, 2021.

Overview

We are a clinical-stage, oncology-focused biopharmaceutical company dedicated to destroying cancer differently. By pioneering a novel class of conditionally activated biologics, powered by our Probody® technology platform, our goal is to transcend the limits of current cancer treatments and successfully leverage therapeutic targets and strategies that were once thought to be inaccessible.

Probody therapeutic candidates are designed to be conditionally activated in the tumor microenvironment, effectively enabling the targeting of cancer tissues more specifically, while minimizing deleterious activity in healthy tissues and in circulation. We achieve this conditional activation by modifying our therapeutic product candidates with a mask that is designed to block binding to target until the mask is removed by proteases, which are enzymes that are more active in the tumor microenvironment than in normal tissue. We believe this innovative approach has the promise to improve cancer treatments in three ways by:

(1) Enhancing a potential product's therapeutic window, the balance between tolerability and anti-tumor activity;

(2) Allowing the pursuit of anti-cancer targets that were previously considered "undruggable," due to their widespread presence on normal tissues; and

(3) Enabling the development of new combination therapies that are otherwise poorly tolerated.

We are employing our industry-leading conditionally activated Probody platform to address some of the biggest challenges today in oncology biologics research and development and have successfully applied our technology to a variety of biologic modalities including antibodies, antibody-drug conjugates ("ADCs"), T-cell bispecifics ("TCBs"), and cytokines; all of which are in various stages of development spanning from discovery to clinical development.

Our robust and differentiated product pipeline includes the wholly-owned, praluzatamab ravtansine (CX-2009) and the AbbVie-partnered CX-2029, two investigational conditionally activated ADCs directed toward the previously undruggable targets CD166 and CD71, respectively. These cancer targets were considered inaccessible to conventional ADCs due to their ubiquitous expression in many healthy tissues, but we believe they are potentially addressable with our Probody technology. Having demonstrated favorable tolerability and encouraging anti-tumor activity in separate dose-escalation Phase 1 studies, praluzatamab ravtansine and CX-2029 are currently in Phase 2 clinical studies.

We are currently enrolling patients into a three-arm study of praluzatamab ravtansine in patients with advanced human epidermal growth factor receptor 2 ("HER2")-non-amplified breast cancer. Arms A and B will evaluate praluzatamab ravtansine monotherapy in patients with hormone receptor-positive ("HR+")/HER2-non-amplified breast cancer and triple-negative breast cancer ("TNBC"), respectively. Arm C will evaluate praluzatamab ravtansine in combination with pacmilimab (CX-072), our wholly-owned PD-L1 inhibitor, both administered every three weeks in patients with TNBC. We expect approximately 40 efficacy-evaluable patients will be enrolled in each arm of the study. Initial data for Arms A and B are expected in the second half of 2022.

CX-2029, our CD71-directed ADC is being evaluated as monotherapy in a four-cohort Phase 2 expansion study designed to enroll twenty five efficacy evaluable patients with squamous non-small cell lung cancer ("sqNSCLC"), head and neck squamous cell carcinoma ("HNSCC"), esophageal and gastro-esophageal junction cancers, and diffuse large B-cell lymphoma. Preliminary data from the CX-2029 study for sqNSCLC and HNSCC were disclosed via a company press release in December 2021 in which encouraging activity in patients with sqNSCLC was highlighted. Patient enrollment continues in the expansion phase of this study with certain additional data updates expected in 2022.

Our robust clinical pipeline also includes cancer immunotherapeutic candidates against validated targets such as CTLA-4. Our partner, Bristol Myers Squibb, is conducting a randomized Phase 2 study evaluating BMS-986249, a Probody version of the CTLA-4-targeting

antibody, ipilimumab, in combination with the anti-PD-1 antibody, nivolumab, in patients with metastatic melanoma. In addition, BMS-986249 is being studied in combination with nivolumab in three additional indications: advanced hepatocellular carcinoma, metastatic castration-resistant prostate cancer and advanced TNBC. Bristol Myers Squibb also continues to evaluate BMS-986288, a Probody version of non-fucosylated ipilimumab, as monotherapy or in combination with nivolumab in a Phase 1 clinical study.

Underscoring our commitment to destroying cancer differently, we have recently introduced the third treatment modality overall into the clinic from our versatile and tunable Probody platform, reinforcing our leadership in the field of conditional activation of biologic therapeutics. As part of our partnership with Amgen, we are advancing CX-904, a conditionally activated T-cell-engaging bispecific antibody candidate against the epidermal growth factor receptor ("EGFR") on tumor cells and CD3 on T cells. In January 2022, our investigational new drug application ("IND") for CX-904 was allowed to proceed by the FDA. We are in the process of initiating a first-in-human Phase 1 study to evaluate CX-904 as a treatment for patients with advanced solid tumors and expect to dose the first patient in the first half of 2022.

In preclinical studies, we are developing CX-2043, our third conditionally activated ADC directed toward the epithelial cell adhesion molecule ("EpCAM"), a widely expressed tumor antigen. CX-2043 has demonstrated potent anti-tumor activity across multiple cancer types and superior tolerability in animal models compared to the corresponding unmasked ADC. We are also engaged in drug discovery efforts towards the generation of new clinical candidates for the treatment of cancer, including the application of our conditional activation platform to the engineering of novel, locally active cytokines, including interferon-alpha-2b, as well as additional TCBs.

In January and February 2021, we completed an underwritten public offering of 16,428,571 shares of common stock at a price of $7.00 per share. The aggregate net proceeds received by us from the offering were $107.7 million, after deducting underwriting discounts and commissions and offering expenses of $7.3 million.

We do not have any products approved for sale, and we continue to incur significant research and development and general administrative expenses related to our operations. We are not profitable and have incurred losses in each year since our founding in 2008. Our net loss was $83.6 million, $32.9 million, and $102.2 million for 2021, 2020 and 2019, respectively. As of December 31, 2021and 2020, we had an accumulated deficit of $533.7 million and $450.1 million, respectively. We expect to continue to incur significant losses for the foreseeable future.

Global health authorities, including the FDA, regulate many aspects of a product candidate's life cycle, including research and development and preclinical and clinical testing. We will need to commit significant time, resources, and funding to develop our wholly-owned and partnered product candidates in clinical trials, including praluzatamab ravtansine, CX-2029, pacmilimab, and CX-904 as well as any additional product candidates for which we initiate clinical studies in the future. We are unable to provide the nature, timing, and estimated costs of the efforts necessary to complete the development of our product candidates because, among other reasons, of regulatory uncertainty, manufacturing limitations, and the pace of enrollment of our clinical trials, which is a function of many factors, including the availability and proximity of patients with the relevant condition.

We currently have no manufacturing capabilities and do not intend to establish any such capabilities in the near term. As such, we are dependent on third parties to supply our product candidates according to our specifications, in sufficient quantities, on time, in compliance with appropriate regulatory standards and at competitive prices.

Impact of COVID-19

In December 2019, a strain of novel coronavirus-caused disease (now commonly known as COVID-19) was reported to have surfaced in Wuhan, China and in March 2020 the World Health Organization declared the outbreak a pandemic There continues to be uncertainty as to the extent and duration of the COVID-19 pandemic including the emergence and impact of new variants.

During 2020 and 2021, the COVID-19 outbreak impacted our ongoing operations, including clinical trials. Any preventative or protective actions that we, our collaboration partners or others have taken, or may take, in respect of the virus may result in further disruption for our clinical trials, including clinical trials for praluzatamab ravtansine, CX-2029 and CX-904, manufacturing, research, financial reporting capabilities and operations generally and could potentially impact our patients, partners, employees and third parties. Any resulting financial impact cannot be reasonably estimated at this time but may materially affect the business and our financial condition and results of operations. The extent to which the COVID-19 pandemic continues to impact our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions necessary to contain the virus or treat its impact, among others. Currently, it is not possible to predict how long the pandemic will last or the extent or degree of its ongoing impact on economic activity, and our business. We do not know the full extent of any impact or delay on our business or our operations, including clinical trial activity,

however, we will continue to monitor the COVID-19 situation closely and operate in accordance with all relevant health and safety guidelines as they evolve in response to changing public health conditions.

Components of Results of Operations

Revenue

Our revenue to date has been primarily derived from non-refundable license payments, milestone payments and reimbursements for research and development expenses under our research, collaboration, and license agreements. We recognize revenue from upfront payments over the term of our estimated period of performance under the agreement using a cost-based input method or a common measure of progress for the entire performance obligation. In addition to receiving upfront payments, we may also be entitled to milestone and other contingent payments upon achieving predefined objectives. Revenue from milestones and other contingent payments, when it is probable that there will not be a significant revenue reversal, is also recognized over the performance period based on a similar method. Reimbursements from Astellas and Bristol Myers Squibb for research and development costs when incurred under our research, collaboration and license agreements with them are classified as revenue.

For the foreseeable future, we do not expect to generate any revenue from the sale of products unless and until such time as our product candidates have advanced through clinical development and obtained regulatory approval. We expect that any revenue we generate in the foreseeable future will fluctuate from year to year as a result of the timing and amount of milestones and other payments from our collaboration agreements with AbbVie, Amgen, Astellas, Bristol Myers Squibb and any other collaboration partners, and as a result of the fluctuations in the research and development expenses we incur in the performance of assigned activities under these agreements.

AbbVie, one of our collaboration partners, entered into a license agreement with Seagen Inc., ("SGEN") to license certain intellectual property rights. As part of our collaboration agreement with AbbVie, we received a sublicense to these intellectual property rights and therefore pay SGEN sublicense fees. These sublicense fees are treated as reductions to the transaction price and combined with the performance obligation to which they relate. Milestone payments, when considered probable of being reached and when a significant revenue reversal would not be probable of occurring, are also recorded net of the associated sublicense fees and included in the transaction price.

Research and Development Expenses

Our research and development expenses consist primarily of costs incurred to conduct research, such as the discovery and development of our product candidates, clinical development, including activities with third parties, such as contract research organizations ("CRO") and contract development and manufacturing organizations ("CMO"), and the manufacture of drug products used in clinical trials, as well as the development of product candidates pursuant to our research, collaboration and license agreements. Research and development expenses include personnel costs, including stock-based compensation expense, contractor services, laboratory materials and supplies, depreciation and maintenance of research equipment, and an allocation of related facilities costs. We expense research and development costs as incurred.

We expect our research and development expenses to increase substantially in absolute dollars in the future as we advance our product candidates through clinical trials, initiate additional clinical trials, and pursue regulatory approval of our product candidates. Examples include our Phase 2 clinical trials for praluzatamab ravtansine (CX-2009) and CX-2029, potential future clinical trials for CX-2029 and for praluzatamab ravtansine in combination with pacmilimab (CX-072) and our Phase 1 clinical trial for CX-904 which is in the process of being initiated. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming. The actual probability of success for our product candidates may be affected by a variety of factors including: the safety and efficacy of our product candidates, early clinical data, investment in our clinical program, the ability of collaborators to successfully develop our licensed product candidates, competition, manufacturing capability and commercial viability. We may never succeed in achieving regulatory approval for any of our product candidates. As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates.

General and Administrative Expenses

General and administrative expenses include personnel costs, expenses for outside professional services and other allocated expenses. Personnel costs consist of salaries, bonuses, benefits and stock-based compensation. Outside professional services consist of accounting and audit services, legal and other consulting fees. Allocated expenses primarily consist of rent expense related to our office and information technology related costs.

Interest Income

Interest income primarily consists of interest income from our cash equivalents and investments, and accretion of discounts or amortization of premiums on our investments.

Other Income (Expense), Net

Other income (expense), net consists primarily of gains and losses resulting from changes to currency exchange rates.

Income Taxes

Income taxes are recorded in accordance with ASC 740, Accounting for Income Taxes, or ASC 740, which provides for deferred taxes using an asset and liability approach. We recognize deferred tax assets and liabilities for the expected future tax consequences of events that have been included in our financial statements or tax returns. We determine our deferred tax assets and liabilities based on differences between the financial reporting and tax bases of assets and liabilities, which are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Valuation allowances are provided, if based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

We also account for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, we recognize the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The tax relief measures under the CARES Act for businesses include a five-year net operating loss carryback, suspension of annual deduction limitation of 80% of taxable income from net operating losses generated in a tax year beginning after December 31, 2017, changes in the deductibility of interest, acceleration of alternative minimum tax credit refunds, payroll tax relief, and a technical correction to allow accelerated deductions for qualified improvement property. We record the effect of an enacted change in a tax law in the period that includes the enactment date in accordance with ASC 740.

Comparison of Years Ended December 31, 2021 and 2020

Revenue

The following table summarizes our revenue by collaboration partner during the respective periods:

	Year Ended December 31,		
	2021	2020	Change
		(in thousands)	
AbbVie	$ 11,845	$ 38,192	$ (26,347)
Amgen	8,744	8,609	135
Astellas	19,365	13,931	5,434
Bristol Myers Squibb	29,619	39,630	(10,011)
Total revenue	$ 69,573	$ 100,362	$ (30,789)

The decrease in revenue of $30.8 million for 2021 compared to 2020 was primarily due to:

- a decrease in revenue of $26.3 million from AbbVie primarily due to the $40.0 million milestone payment earned in the first quarter of 2020 for satisfying the CD71 dose escalation success criteria milestone under the CD71 Co-Development and Licensing Agreement (the "CD71 Agreement"), of which $26.6 million was recognized reflecting the project percentage completion to date in the first quarter of 2020; and
- a decrease in revenue from Bristol Myers Squibb of $10.0 million due to the recognition in full of the $10.0 million milestone payment earned for achieving the dosing of the first patient in the Part 2 cohort expansion of the ongoing CTLA-4 program by Bristol Myers Squibb in February 2020; partially offset by
- an increase in revenue from Astellas of $5.4 million due to a full year recognition of the $80.0 million upfront payment over the estimated research service period of five years under the Astellas Agreement entered into in March 2020, as well as the increased research services during the current period.

Operating Costs and Expenses

Research and Development Expenses

The following table summarizes our research and development expenses by program incurred during the respective periods presented:

	Year Ended December 31,		
	2021	2020	Change
	(in thousands)		
External costs incurred by product candidate (target):			
CX-2009 (CD166)	$ 18,516	$ 16,191	$ 2,325
CX-2029 (CD71)	11,556	5,978	5,578
CX-072 (PD-L1)	3,535	10,642	(7,107)
Other wholly owned and partnered programs	17,353	19,255	(1,902)
General research and development expenses	13,534	13,016	518
	64,494	65,082	(588)
Internal Costs	49,700	47,854	1,846
Total research and development expenses	$ 114,194	$ 112,936	$ 1,258

The increase in research and development expenses for 2021 compared to 2020 was attributable to the following changes by project:

- The increase in CX-2029 expenses was primarily driven by a $5.8 million increase in clinical trial expenses and laboratory contract and services due to increase in patient enrollment activities;
- The increase in CX-2009 expenses was primarily driven by a $3.9 million increase in clinical trial studies and laboratory contract services due to increase in manufacturing and development activities, as well as a $1.2 million increase in consulting expenses; partially offset by a $3.0 million licensing payment to ImmunoGen in the first quarter of 2020;
- The decrease in CX-072 expenses was primarily due to a $5.1 million decrease in clinical trial related expenses and a $1.3 million decrease in laboratory contract services as a result of the timing of manufacturing and other research activities in the CX-072-001 study and the termination of the CX-072-002 study;
- The decrease in "Other wholly owned and partnered programs" was primarily due to a $6.0 million sublicense fee payment to UCSB related to the $80.0 million upfront payment under the Astellas Agreement during the first quarter of 2020; a $4.1 million decrease in laboratory contracts and services related to the CX-904 program as it moved into the IND application preparation phase; partially offset by an increase of $7.9 million in laboratory contracts and services expenses related to the EpCAM program due to an increase in pre-clinical activities.

General and Administrative Expenses

	Year Ended December 31,		
	2021	2020	Change
	(in thousands)		
General and administrative	$ 39,160	$ 36,031	$ 3,129

General and administrative expenses increased by $3.1 million during 2021 compared to 2020 primarily due to an increase in personnel related and recruiting expenses.

Interest Income and Other Expense, Net

	Year Ended December 31,		
	2021	2020	Change
	(in thousands)		
Interest income	$ 255	$ 1,836	$ (1,581)
Other expense, net	(83)	(27)	(56)
Total interest income and other expense	$ 172	$ 1,809	$ (1,637)

Interest Income

Interest income decreased by $1.6 million during 2021 compared to 2020, primarily driven by lower interest rates in 2021.

Income Taxes

	Year Ended December 31,		
	2021	2020	Change
		(in thousands)	
Benefit from income taxes	$ -	$ (13,911)	$ 13,911

Income tax benefit decreased by $13.9 million for 2021 compared to 2020. The income tax benefit of $13.9 million for 2020 was generated due to the recognition of net operating loss carrybacks under the CARES Act, which generated a tax refund of taxes paid for 2018.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2021, we had cash, cash equivalents and investments of $305.2 million and an accumulated deficit of $533.7 million, compared to cash, cash equivalents and investments of $316.1 million and an accumulated deficit of $450.1 million as of December 31, 2020. In January and February 2021, in an underwritten public offering of our common stock, we raised an aggregate net proceeds of approximately $107.7 million. To date, we have financed our operations primarily through sales of our common stock in conjunction with the IPO, subsequent stock offerings and through our at-the-market offering, sales of our convertible preferred securities prior to our IPO and payments received under our collaboration agreements.

Based upon our current operating plan, we expect our existing capital resources will be sufficient to fund operations for a period of at least twelve months from the issuance date of the financial statements included in this report. However, if the anticipated operating results and future financing are not achieved in future periods, our planned expenditures may need to be reduced in order to extend the time period over which the then-available resources would be able to fund the operations. The amounts and timing of our actual expenditures depend on numerous factors, including the progress of our preclinical and clinical development efforts, the results of any clinical trials and other studies, our operating costs and expenditures and other factors described under the caption "Risk Factors" in this Annual Report on Form 10-K. The cost and timing of developing our product candidates is highly uncertain and subject to substantial risks and changes. As such, we may alter our expenditures as a result of contingencies such as the failure of one or all of our product candidates currently in clinical development, the acceleration of one or all of our product candidates in clinical development, the initiating of clinical trials for additional product candidates, the identification of more promising product candidates in our research efforts or unexpected operating costs and expenditures. We will need to raise additional funds in the future. There can be no assurance, however, that such efforts will be successful; or if they are successful, that the terms and conditions of such financing will be favorable to us.

Summary Statement of Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year Ended December 31,		
	2021	2020	2019
		(in thousands)	
Net cash provided by (used in) operating activities	$ (119,031)	$ 5,259	$ (140,480)
Net cash provided by (used in) by investing activities	22,489	(18,718)	79,701
Net cash provided by financing activities	110,213	16,893	1,627
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 13,671	$ 3,434	$ (59,152)

Cash Flows from Operating Activities

2021

During the year ended December 31, 2021, cash used in operating activities was $119.0 million, which consisted of a net loss of $83.6 million, adjusted by non-cash charges of $19.3 million and a net decrease of $54.7 million relating to the changes in our net operating assets and liabilities. The non-cash charges primarily consisted of $13.2 million in stock-based compensation, $3.1 million in non-cash lease expense, $2.7 million in depreciation and amortization and $0.3 million in net accretion of discounts on our investments.

The change of our net operating assets and liabilities was primarily due to:

- a net decrease of $66.2 million in deferred revenue resulting from the continued recognition of deferred revenue from existing customers;
- an increase of $7.4 million in accrued liabilities and accounts payable primarily due to timing of payments and an increase in research and clinical expenses
- an increase of $4.1 million in cash flows from prepaid expenses and other current assets and other assets primarily due to reduced advance payments to our third-party manufacturing vendors and timing of payments.

2020

During the year ended December 31, 2020, cash provided by operating activities was $5.3 million, which consisted of a net loss of $32.9 million, adjusted by non-cash charges of $20.1 million and a net increase of $18.1 million relating to the change of our net operating assets and liabilities. The non-cash charges primarily consisted of $14.8 million in stock-based compensation, $2.9 million in non-cash lease expense and $2.6 million in depreciation and amortization, which amounts were partially offset by $0.2 million in net accretion of discounts on our short-term investments.

The change of our net operating assets and liabilities was primarily due to:

- a net increase of $30.9 million in deferred revenue resulting primarily from the $80.0 million upfront payment from Astellas as well as the $40.0 million milestone payment from AbbVie, partially offset by the continued recognition of deferred revenue from other existing customers;
- an increase of $0.1 million in cash flows from prepaid expenses and other current assets;
- a decrease of $0.2 million in cash flows from other assets;
- a decrease of $11.0 million in accrued liabilities primarily due to payment of $7.5 million for the ImmunoGen 2019 License and $2.8 million for lease liabilities;
- a decrease in cashflow of $0.8 million from accounts receivable primarily related to research and development service fees due from Astellas pursuant to the Astellas Agreement; and
- a decrease in cashflow of $0.9 million from accounts payable.

Cash Flows from Investing Activities

During the year ended December 31, 2021, cash provided by investing activities was $22.5 million, which consisted of $124.0 million in proceeds received upon the maturity of short-term marketable securities, partially offset by $99.9 million used in the purchase of long-term investments and $1.6 million of capital expenditures used to purchase property and equipment.

During the year ended December 31, 2020, cash used in investing activities was $18.7 million, which consisted of $199.1 million used in the purchase of short-term investments and $2.3 million of capital expenditures used to purchase property and equipment, partially offset by $182.7 million in proceeds received upon the maturity of marketable securities.

Cash Flows from Financing Activities

During the year ended December 31, 2021, cash provided by financing activities was $110.2 million, which consisted of $107.7 million of net proceeds from the follow-on public offering in January and February 2021 and $2.5 million of proceeds from the exercise of stock options and employee stock purchases under the employee stock purchase plan (“ESPP”).

During the year ended December 31, 2020, cash provided by financing activities was $16.9 million, which primarily consisted of proceeds from our common stock issuance of $11.3 million under the Open Market Sales Agreement (net of underwriting discounts and stock issuance costs of $0.4 million) and $5.6 million from the exercise of stock options and employee stock purchases under the ESPP.

Contractual Obligations

The following table summarizes our contractual obligations that become due within the next twelve months (in thousands):

	Payments Due by 2022
Operating leases[1]	$ 5,273
Royalty obligations[2]	150
License maintenance fees[3]	750
Total contractual obligations	$ 6,173

(1) We lease our current facility under a long-term operating lease, which expires in 2026. The lease provides us with one option to extend the lease term for a period of five years at the then fair market rental value.

(2) We have royalty obligations under the terms of certain exclusive licensed patent rights. The royalty obligations are cancellable any time by giving notice to the licensor, with the termination being effective 60 days after giving notice. See Part II. Item 8. Financial Statements and Supplementary Data, Note 10 - “License Agreement" in the accompanying Notes to the financial statements for more information.

(3) We have annual license maintenance fees under the terms of certain license agreement with UCSB. See Part II. Item 8. Financial Statements and Supplementary Data, Note 10 - “License Agreement” in the accompanying Notes to the financial statements for more information.

We enter into agreements in the normal course of business with CROs for clinical trials and with vendors for pre-clinical studies and other services and products for operating purposes, which are cancelable at any time by us, generally upon 30 to 60 days prior written notice. These payments are not included in the above table of contractual obligations. The above table also excludes unrecognized tax benefits of $7.8 million as of December 31, 2021 because these uncertain tax positions, if recognized, would be an adjustment to our deferred tax assets, which are subject to a valuation allowance.

Segment Information

We have one primary business activity and operate as one reportable segment.

Critical Accounting Policies and Estimates

Our management’s discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with United States generally accepted accounting principles (“U.S. GAAP”). The preparation of these financial statements requires our management to make judgments and estimates that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these judgments and estimates under different assumptions or conditions and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management’s judgments and estimates.

Revenue Recognition

We recognize revenue when our customer obtains control of the promised goods or services, in an amount that reflects the consideration which we have received or expect to receive in exchange for those goods or services.

Our revenues are primarily derived through our license, research, development and commercialization agreements. The terms of these types of agreements may include (i) licenses for our technology or programs, (ii) research and development services, and (iii) services or obligations in connection with participation in research or steering committees. Payments to us under these arrangements typically include one or more of the following: nonrefundable upfront and license fees, research funding, milestone and other contingent payments to us for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products. We assess whether the promises in our arrangements with customers are considered as distinct performance obligations that should be accounted for separately. Judgment is required to determine whether the license to our intellectual property is distinct from the research and development services or participation on steering committees.

Our collaboration and license agreements may include contingent payments related to specified research, development and regulatory milestones. Such milestone payments are typically payable under the collaborations when the collaboration partner claims or selects a target, or initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities; or upon receipt of actual marketing approvals of a covered product or for additional indications. To date we have concluded that these contingent payments should be fully constrained until the conditions are met. At each reporting date, we re-evaluate whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price in such period of determination.

Our collaboration and license agreements may also include contingent payments related to sales-based milestones. Sales-based milestones are typically payable when annual sales of a covered product reach specified levels. Sales-based milestones are recognized at the later of when the associated performance obligation has been satisfied or when the sales occur. Unlike other contingency payments, such as regulatory milestones, sales-based milestones are not included in the transaction price based on estimates at the inception of the contract, but rather, are included when the sales or usage occur.

The transaction price in each arrangement is allocated to the identified performance obligations based on the relative standalone selling price ("SSP") of each distinct performance obligation, which requires judgment. In instances where SSP is not directly observable, such as when a license or service is not sold separately, SSP is determined using information that may include market conditions and other observable inputs. Due to the early stage of our licensed technology, the license of such technology is typically combined with research and development services and steering committee participation as one performance obligation. In the event that we receive non-cash consideration such as consideration in the form of a research license and research support services from the counterparty, the transaction price of a non-monetary exchange that has commercial substance is estimated based on the fair value of the non-cash consideration received, which may be determined through a valuation analysis.

Most of our collaboration arrangements are related to delivering a combined performance obligation satisfied over time. Some of our revenue is recognized over a defined research period as stand-ready obligations, while others are recognized using a cost-based input measure based on our actual full time employee ("FTE") hours incurred as a percentage of projected FTE hours for completing the performance obligation. We evaluate the measure of progress each reporting period and, if necessary, we adjust the measure of performance and related revenue recognition. There have been changes in estimates of research service periods and the related estimated FTE hours-to-completion, of certain of our research development programs in 2021, 2020, and 2019. Such adjustments have impacted and may continue to impact the amounts and timing of our revenue recognized.

Research and Development Expenses

We record accrued liabilities for estimated costs of research, preclinical and clinical studies and contract manufacturing activities, which are a significant component of research and development expenses. A substantial portion of our ongoing research and development activities is conducted by third-party service providers, including CROs. Our contracts with CROs generally include pass-through costs, such as regulatory expenses, investigator fees, travel costs and other miscellaneous costs. The financial terms of these contracts are subject to negotiations, which vary from contract to contract and may result in payments that do not match the periods over which materials or services are provided to us under such contracts. We accrue the costs incurred under agreements with these third parties based on actual work completed in accordance with the respective agreements. In the event we make advance payments, they are recorded as prepaid expenses and recognized as the services are performed. We determine the estimated costs through discussions with internal personnel and external service providers as to the progress of stage of completion of the services and the agreed-upon fees to be paid for such services.

We make significant judgments and estimates in determining the accrual balance in each reporting period. As actual costs become known, we adjust our accruals. Although we do not expect our estimates to be materially different than the actual amounts incurred, such estimates for the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any one period. Our accrual is dependent, in part, upon the receipt of timely and accurate reporting from CROs and other third-party vendors. Variations in the assumptions used to estimate accruals including, but not limited to, the number of patients enrolled, the rate of patient enrollment and the actual services performed, may vary from our estimates, resulting in adjustments to clinical trial expenses in future periods. Changes in these estimates that result in material changes to our accruals could materially affect our financial condition and results of operations. There has not been material changes in estimates in recent years.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rate risks. We had cash, cash equivalents and investments of $305.2 million and $316.1 million as of December 31, 2021 and 2020, respectively, which consists of bank deposits, money market funds and U.S. government bonds. Such interest-bearing instruments carry a degree of interest rate risk; however, historical fluctuations of interest income have not been significant.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate exposure. We have not historically been exposed to material risks due to changes in interest rates. Based on our investment positions as of December 31, 2021, a hypothetical 100 basis point change in interest rates would not have material effect in the fair value of the portfolio.

Item 8. ***Financial Statements and Supplementary Data***

CYTOMX THERAPEUTICS, INC.
ANNUAL REPORT ON FORM 10-K
INDEX TO AUDITED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CytomX Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of CytomX Therapeutics, Inc. (the Company) as of December 31, 2021 and 2020, the related statements of operations and comprehensive loss**,** stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the " financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 1, 2022, expressed an unqualified opinion thereon.

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 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. 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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Accounting for revenue and collaboration agreements

Description of the Matter

The Company recorded revenue from collaboration agreements of $69.6 million for the year ended December 31, 2021. As described in Note 2, the terms of the Company's collaboration agreements may include licenses for the Company's technology or programs, research and development services, and services or obligations in connection with participation in research or steering committees. Amounts received under these arrangements typically include nonrefundable upfront payments and license fees, research funding, milestone and other contingent payments for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products.

Auditing the Company's accounting for revenues from collaboration arrangements was complex and required significant judgments primarily in identifying which elements represent revenue producing performance obligations, determining the measurement and allocation of arrangement consideration, and evaluating estimates of the total expected inputs under the input method for revenue recognized over time.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's processes for assessing the accounting treatment of its collaboration arrangements, including controls over the review of contracts and accounting conclusions, as well as controls over the completeness and accuracy of the data used. We also tested the controls over the development of estimated total inputs for revenue recognized over time.

To test the accounting treatment for revenue from collaboration arrangements, we evaluated, among other things, whether the identified performance obligations were properly determined, and the transaction price was properly measured and allocated to the identified performance obligations. To test the measurement of efforts toward satisfying the performance obligation, our audit procedures included, among others, reviewing management's analysis for accuracy and completeness by agreeing data to the underlying contract, inspecting communications with the collaborative partner, evaluating the application of the input method for the recognition of revenue and testing the estimated total inputs and actual inputs incurred.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017.
Redwood City, California
March 1, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CytomX Therapeutics, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited CytomX Therapeutics, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, CytomX Therapeutics, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the balance sheets of the Company as of December 31, 2021 and 2020, the related statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and our report dated March 1, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP
Redwood City, California
March 1, 2022

CYTOMX THERAPEUTICS, INC.
BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 205,530	$ 191,859
Short-term investments	99,696	124,260
Accounts receivable	790	798
Prepaid expenses and other current assets	4,285	7,096
Total current assets	310,301	324,013
Property and equipment, net	5,960	6,950
Intangible assets, net	1,021	1,167
Goodwill	949	949
Restricted cash	917	917
Operating lease right-of-use asset	19,362	22,495
Other assets	901	2,172
Total assets	$ 339,411	$ 358,663
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,818	$ 2,996
Accrued liabilities	34,236	23,059
Deferred revenues, current portion	69,262	74,869
Total current liabilities	106,316	100,924
Deferred revenue, net of current portion	125,660	186,261
Operating lease liabilities - long term	18,056	21,675
Total liabilities	250,032	308,860
Commitments and contingencies (Note 11)		
Stockholders' equity		
Convertible preferred stock, $0.00001 par value; 10,000,000 shares authorized and no shares issued and outstanding at December 31, 2021 and 2020	—	—
Common stock, $0.00001 par value; 150,000,000 shares authorized, and 65,392,758 and 48,251,819 shares issued and outstanding at December 31, 2021 and 2020, respectively	1	1
Additional paid-in capital	623,344	499,964
Accumulated other comprehensive loss	(242)	(47)
Accumulated deficit	(533,724)	(450,115)
Total stockholders' equity	89,379	49,803
Total liabilities and stockholders' equity	$ 339,411	$ 358,663

See accompanying notes to financial statements

CYTOMX THERAPEUTICS, INC.
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Year Ended December 31,		
	2021	2020	2019
Revenues	$ 69,573	$ 100,362	$ 57,489
Operating expenses:			
Research and development	114,194	112,936	131,619
General and administrative	39,160	36,031	36,765
Total operating expenses	153,354	148,967	168,384
Loss from operations	(83,781)	(48,605)	(110,895)
Interest income	255	1,836	8,365
Other expense, net	(83)	(27)	(135)
Loss before income taxes	(83,609)	(46,796)	(102,665)
Benefit from income taxes	-	(13,911)	(427)
Net loss	$ (83,609)	$ (32,885)	$ (102,238)
Net loss per share, basic and diluted	$ (1.30)	$ (0.71)	$ (2.26)
Shares used to compute net loss per share, basic and diluted	64,146,848	46,145,563	45,335,927
Other comprehensive income (loss):			
Unrealized gain (loss) on short-term investments, net of tax	$ (195)	$ (104)	$ 139
Impact of adoption of new accounting pronouncement	—	—	11
Total comprehensive loss	$ (83,804)	$ (32,989)	$ (102,088)

See accompanying notes to financial statements

CYTOMX THERAPEUTIC, INC.
Statements of Stockholders' Equity
(in thousands, except share and per share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income/(Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2018	45,083,209	$ 1	$ 445,956	$ (93)	$ (314,981)	$ 130,883
Impact of adoption of new accounting pronouncement - ASU 2018-02	—	—	—	11	(11)	—
Exercise of stock options	146,930	—	633	—	—	633
Issuance of common stock under the Employee Stock Purchase Plan	142,949	—	994	—	—	994
Issuance of common stock to UCSB	150,000	—	1,602	—	—	1,602
Stock-based compensation	—	—	19,100	—	—	19,100
Other comprehensive income	—	—	—	139	—	139
Net loss	—	—	—	—	(102,238)	(102,238)
Balance at December 31, 2019	45,523,088	1	468,285	57	(417,230)	51,113
Exercise of stock options	1,064,830	—	4,876	—	—	4,876
Issuance of common stock under the Employee Stock Purchase Plan	128,684	—	729	—	—	729
Issuance of common stock under the Open Market Sale Agreement, net of issuance cost	1,535,217	—	11,288	—	—	11,288
Stock-based compensation	—	—	14,786	—	—	14,786
Other comprehensive loss	—	—	—	(104)	—	(104)
Net loss	—	—	—	—	(32,885)	(32,885)
Balance at December 31, 2020	48,251,819	1	499,964	(47)	(450,115)	49,803
Exercise of stock options	528,503	—	1,428	—	—	1,428
Issuance of common stock under the Employee Stock Purchase Plan	183,865	—	1,073	—	—	1,073
Issuance of common stock in follow-on offering, net of issuance cost	16,428,571	—	107,712	—	—	107,712
Stock-based compensation	—	—	13,167	—	—	13,167
Other comprehensive loss	—	—	—	(195)	—	(195)
Net loss	—	—	—	—	(83,609)	(83,609)
Balance at December 31, 2021	65,392,758	$ 1	$ 623,344	$ (242)	$ (533,724)	$ 89,379

See accompanying notes to financial statements

CYTOMX THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2021	**2020**	**2019**
Cash flows from operating activities:			
Net loss	$ (83,609)	$ (32,885)	$ (102,238)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Amortization of intangible assets	146	146	146
Depreciation and amortization	2,560	2,427	2,459
Amortization of premium (accretion of discounts) on investments	272	(236)	(2,228)
Stock-based compensation expense	13,167	14,786	19,100
Non-cash lease expense	3,133	2,887	2,672
Issuance of common stock in connection with UCSB sublicense fee	—	—	1,602
Changes in operating assets and liabilities			
Accounts receivable	8	(785)	84
Prepaid expenses and other current assets	2,811	81	2,074
Other assets	1,271	(157)	(640)
Accounts payable	(139)	(857)	(374)
Accrued liabilities, income tax payable and other long-term liabilities	7,558	(11,039)	(15,396)
Deferred revenue	(66,209)	30,891	(47,741)
Net cash (used in) provided by operating activities	$ (119,031)	$ 5,259	$ (140,480)
Cash flows from investing activities:			
Purchases of property and equipment	(1,609)	(2,309)	(3,497)
Purchases of investments	(99,898)	(199,108)	(174,992)
Maturities of investments	123,996	182,699	258,190
Net cash provided by (used in) investing activities	$ 22,489	$ (18,718)	$ 79,701
Cash flows from financing activities:			
Proceeds from issuance of common stock, net of issuance costs	107,712	11,288	—
Proceeds from employee stock purchase plan and exercise of stock options	2,501	5,605	1,627
Net cash provided by financing activities	$ 110,213	$ 16,893	$ 1,627
Net increase (decrease) in cash, cash equivalents and restricted cash	13,671	3,434	(59,152)
Cash, cash equivalents and restricted cash, beginning of year	192,776	189,342	248,494
Cash, cash equivalents and restricted cash, end of year	$ 206,447	$ 192,776	$ 189,342
Supplemental disclosures of cash flow information:			
Cash paid for income taxes	$ —	$ —	$ 13,061
Supplemental disclosures of noncash investing items:			
Purchases of property and equipment in accounts payable and accrued liabilities	$ 83	$ 122	$ 428
Right of use assets obtained in exchange for operating lease obligations	$ —	$ —	$ 28,054

See accompanying notes to financial statements

1. Description of the Business

CytomX Therapeutics, Inc. (the "Company") is a clinical-stage, oncology-focused biopharmaceutical company dedicated to destroying cancer differently. The Company aims to build a commercial enterprise to maximize its impact on the treatment of cancer. The Company is advancing potential first-in-class and best-in-class antibody-based therapeutics created using its Probody® therapeutic technology platform that could meaningfully improve outcomes for cancer patients. Its proprietary and unique Probody technology platform is designed to enable "conditional activation" of antibody-based drugs in the tumor microenvironment while minimizing drug activity in healthy tissues and in circulation. The Company is located in South San Francisco, California and was incorporated in the state of Delaware in September 2010.

2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Use of Estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Concentration of Credit Risk and Other Risks and Uncertainties

The Company is subject to a number of risks similar to other biopharmaceutical companies in the early stage, including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical testing or clinical trials, the need to obtain marketing approval for its product candidates, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of the Company's products, and protection of proprietary technology. If the Company does not successfully obtain regulatory approval, commercialize or partner any of its product candidates, it will be unable to generate revenue from product sales or achieve profitability.

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents, short-term investments and accounts receivable. Substantially all the Company's cash is held by one financial institution. Such deposits may, at times, exceed federally insured limits. The Company invests its cash equivalents in highly rated money market funds and its short-term investments in U.S. Government Bonds.

Customers and collaboration partners who represent 10% or more of the Company's total revenue during each period presented or accounts receivable balance at each respective balance sheet date are as follows:

	Revenue			Accounts Receivable, net	
	Year Ended December 31,			December 31,	
	2021	2020	2019	2021	2020
		(in thousands)		(in thousands)	
AbbVie Ireland Unlimited Company	$ 11,845	$ 38,192	$ 5,878	$ —	$ —
Amgen, Inc.	8,744	*	*	—	—
Astellas Pharma Inc.	19,365	13,931	—	790	798
Bristol Myers Squibb Company	29,619	39,630	47,740	—	—
Total revenue from customers who represent 10% or more of the Company's total revenue	$ 69,573	$ 91,753	$ 53,618	$ 790	$ 798

* Less than 10%

The Company's customers are located in the United States of America, Ireland and Japan.

Segments

Management has determined that it has one business activity and operates as one operating segment as it only reports financial information on an aggregate basis to its chief executive officer and chief financial officer, who are the Company's chief operating decision makers. All long-lived assets are maintained in the United States of America.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less at the date of purchase to be cash equivalents.

Restricted Cash

Restricted cash represents a standby letter of credit issued pursuant to an office lease.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that sum to the total of the amounts shown in the statement of cash flows:

	December 31		
	2021	2020	2019
		(in thousands)	
Cash and cash equivalents	$ 205,530	$ 191,859	$ 188,425
Restricted cash - non-current assets	917	917	917
Total	$ 206,447	$ 192,776	$ 189,342

Investments

All investments have been classified as available-for-sale ("AFS") and are carried at fair value as determined based upon quoted market prices or pricing models for similar securities at period end. Investments that are required for use in current operations and that mature in less than 12 months are classified as short-term investments in the accompanying balance sheets. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts to maturity. Dividend and interest income are recognized when earned. Realized gains and losses are included in earnings and are derived using the specific identification method for determining the cost of securities sold.

The Company assesses impairment of its AFS debt securities investments at each reporting period. Unrealized gains resulting from the excess of the fair value over the amortized cost basis of an investment are reported as a component of accumulated other comprehensive income (loss), net of tax. Unrealized losses or impairments resulting from the fair value of the AFS debt security being below the amortized cost basis are evaluated, using the discounted cash flow model, for identification of credit losses and non-credit related losses. Any credit losses are charged to earnings against the allowance for credit losses of the security, limited to the difference between the fair value and the amortized cost basis of the security. Any difference between the fair value of the security and the amortized cost basis, less the allowance for credit losses, are reported in other comprehensive income (loss). Expected cash inflows due to improvements in credit are recognized through a reversal of the allowance for credit losses subject to the total allowance previously recognized.

In the event of impairment of any security, if management (i) has the intent to sell such security or (ii) will more-likely-than-not be required to sell such security before recovery of its amortized cost basis, such AFS debt security's amortized cost basis will be written down to its fair value through earnings along with any existing allowance for credit losses.

Property and Equipment, net

Property and equipment are recorded at cost net of accumulated depreciation and amortization. Depreciation is provided using the straight-line method over the estimated useful lives of the respective assets. The useful lives of property and equipment are as follows:

Machinery and equipment	5 years
Computer equipment and software	3 years
Furniture and fixtures	3 years
Leasehold improvements	Shorter of remaining lease term or estimated life of the assets

Maintenance and repairs that do not extend the life or improve the asset are expensed when incurred.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price paid over the fair value of tangible and identifiable intangible assets acquired in business combinations. Goodwill and other intangible assets with indefinite lives are not amortized, but are assigned to reporting units and tested for impairment annually, or whenever there is an impairment indicator. Intangible assets are comprised of in-process research and development. The Company assesses impairment indicators annually as of December 31 or more frequently, if a change in circumstances or the occurrence of events suggests the remaining value may not be recoverable. Intangible assets that are not deemed to have an indefinite life are amortized over their estimated useful lives. There was no impairment of goodwill or intangible assets identified during the years ended December 31, 2021, 2020 and 2019.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable and prior to any goodwill impairment test. An impairment loss is recognized when the total of estimated undiscounted future cash flows expected to result from the use of the asset (or asset group) and its eventual disposition is less than its carrying amount. Impairment, if any, would be assessed using discounted cash flows or other appropriate measures of fair value. There was no impairment of long-lived assets during the years ended December 31, 2021, 2020 and 2019.

Revenue Recognition

The Company's revenues are primarily derived through its license, research, development and commercialization agreements. The terms of these types of agreements may include (i) licenses for the Company's technology or programs, (ii) research and development services, and (iii) services or obligations in connection with participation in research or steering committees. Payments to the Company under these arrangements typically include one or more of the following: nonrefundable upfront and license fees, research funding, milestone and other contingent payments to the Company for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products.

The Company assesses whether the promises in its arrangements with customers are distinct performance obligations that should be accounted for separately. Judgment is required to determine whether the license to the Company's intellectual property is distinct from the research and development services or participation on steering committees.

The Company's collaboration and license agreements may include contingent payments related to specified research, development and regulatory milestones. Such milestone payments are typically payable under the collaborations when the collaboration partner claims or selects a target, or initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities, or upon receipt of actual marketing approvals of a covered product or for additional indications. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. At each reporting date, the Company re-evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price in such period of determination.

The Company's collaboration and license agreements may also include contingent payments related to sales-based milestones. Sales-based milestones are typically payable when annual sales of a covered product reach specified levels. Sales-based milestones are recognized at the later of when the associated performance obligation has been satisfied or when the sales occur. Unlike other contingency payments, such as regulatory milestones, sales-based milestones are not included in the transaction price based on estimates at the inception of the contract; instead, are included when the sales or usage occur.

The transaction price in each arrangement is allocated to the identified performance obligations based on the relative standalone selling price ("SSP") of each distinct performance obligation, which requires judgment. In instances where SSP is not directly observable, such as when a license or service is not sold separately, SSP is determined using information that may include market conditions and other observable inputs. Due to the early stage of the Company's licensed technology, the license of such technology is typically combined with research and development services and steering committee participation as one performance obligation. In the event that the Company receives non-cash consideration such as consideration in the form of a research license and research support services from the counterparty, the transaction price of a non-monetary exchange that has commercial substance is estimated based on the fair value of the non-cash consideration received, which may be determined through a valuation analysis.

In certain cases, the Company's performance creates an asset that does not have an alternative use to the customer and the Company has an enforceable right to payment at all times for performance completed to date. In these cases, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

AbbVie Ireland Unlimited Company ("AbbVie"), one of the Company's collaboration partners, entered into a license agreement with Seagen Inc., formerly Seattle Genetics, Inc. ("SGEN") to license certain intellectual property rights. As part of the Company's collaboration agreement with AbbVie, the Company is required to pay SGEN sublicense fees for certain milestone achievements and an annual maintenance fee. These sublicense fees are treated as reductions to the transaction price and combined with the performance obligation to which they relate.

Comprehensive Income (Loss)

Comprehensive income (loss) represents all changes in stockholders' equity except those resulting from distributions to stockholders. The Company's non-credit related unrealized gains and losses on investments and impact of adoption of new accounting pronouncements during the period represent the components of other comprehensive income (loss) that is excluded from the reported net loss.

Contract Balances

Customer payments are recorded as deferred revenue upon receipt or when due and may require deferral of revenue recognition to a future period until the Company satisfies its performance obligations under these arrangements. Amounts payable to the Company are recorded as accounts receivable when the Company's right to consideration is unconditional.

Research and Development Expenses

The Company records accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical and clinical studies, and contract manufacturing activities. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and includes these costs in accrued liabilities in the balance sheets and within research and development expense in the statements of operations. These costs are a significant component of the Company's research and development expenses. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers under the service agreements. The Company makes significant judgments and estimates in determining the accrued liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued liabilities. The Company has not experienced any material differences between accrued costs and actual costs incurred. However, the status and timing of actual services performed may vary from the Company's estimates, resulting in adjustments to expense in future periods. Changes in these estimates that result in material changes to the Company's accruals could materially affect the Company's results of operations.

Research and development expenses include costs directly attributable to the conduct of research and development programs, including the cost of salaries, payroll taxes, employee benefits, materials, supplies, depreciation on and maintenance of research equipment, the cost of services provided by outside contractors, and the allocated portions of facility costs, such as rent, utilities, insurance, repairs and maintenance, depreciation, and general support services. All costs associated with research and development are expensed as incurred.

In January 2019, the Company acquired certain technology know-how that is complementary to the Company's proprietary Probody technology from a third party for $5.0 million. The Company plans to use this technology in certain of the Company's discovery stage projects, and has concluded that the technology acquired does not have an alternative future use. Accordingly, the $5.0 million has been recorded as research and development expense for 2019.

Stock-based Compensation

The Company measures compensation expense for all stock-based payment awards, including employee stock options, restricted stock units ("RSUs"), and employee stock purchases related to Employee Stock Purchase Plan ("ESPP") based on estimated fair values of the award at the grant date, and recognizes compensation expense over the requisite service vesting period. Stock options forfeitures are accounted for in the period in which they occur.

To determine the fair value of a stock option award on the grant date, the Company uses the Black-Scholes option pricing model which consist of estimating variables such as: expected life, volatility, and risk-free interest rate. Expected life and volatility are estimated primarily from the Company's historical records, and the risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant commensurate with the expected life assumption. These estimates involve inherent uncertainties and the application of judgment.

The Company measures its restricted stock unit awards based on the market price of the Company's common shares on the date of grant. Share-based compensation expense for performance-based awards is recognized when it becomes probable that the performance condition will be met. The Company reassesses the estimated probability at each reporting period, and if it is determined at a future date that a performance condition is probable of being achieved, the Company will recognize a cumulative catch-up adjustment and record the remaining expense ratably over the remaining requisite service period.

Income Taxes

The Company accounts for income taxes using an asset and liability approach. Deferred tax assets and liabilities reflect the net tax effects of temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The Company records a valuation allowance to reduce its deferred tax assets to reflect the net amount that it believes as more likely than not to be realized. Realization of the deferred tax assets is dependent on the generation of future taxable income, the amount and timing of which are uncertain. The valuation allowance requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. Based upon the weight of available evidence at December 31, 2021, the Company continues to maintain a full valuation allowance against all of its deferred tax assets after management considered all available evidence, both positive and negative, including but not limited to its historical operating results, income or loss in recent periods, cumulative income in recent years, forecasted earnings, future taxable income, and significant risk and uncertainty related to forecasts.

The Company recognizes the tax effects of an uncertain tax position only if it is more likely than not that it will be sustained based solely on its technical merits as of the reporting date and only in an amount more likely than not that it will be sustained upon review by the tax authorities. The Company evaluates uncertain tax positions on a quarterly basis and adjust the liability for changes in facts and circumstances, such as new regulations or interpretations by the taxing authorities, new information obtained during a tax examination, significant amendment to an existing tax law, or resolution of an examination. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the income tax provision in the period in which such determination is made. The resolution of its uncertain income tax positions is dependent on uncontrollable factors such as law changes, new case law, and the willingness of the income tax authorities to settle, including the timing thereof and other factors. Although the Company does not anticipate significant changes to its uncertain income tax positions in the next twelve months, items outside of its control could cause its uncertain income tax positions to change in the future, which would be recorded in its statements of operations. Interest and/or penalties related to income tax matters are recognized as a component of income tax expense.

Leases

The Company determines if an arrangement is or contains a lease at inception. Operating leases are recorded as operating lease right-of-use ("ROU") assets and operating lease liabilities in the Company's balance sheet. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. The Company uses an implicit rate when readily available, or its incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments. The operating lease ROU assets also include any lease prepayments made and reduced by lease incentives. The Company's lease terms may include options to extend the lease when it is reasonably certain that such option will be exercised. Lease expenses are recognized on a straight-line basis over the lease term. The Company elected the short-term lease recognition exemption. The Company's operating lease arrangement includes lease and non-lease components which are generally accounted for separately.

3. Adopted Accounting Pronouncements

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes. The amendments in this ASU simplify the accounting for income taxes by removing certain exceptions to the general principles of ASC 740 in order to reduce cost and complexity of its application. The ASU removes the exception related to the incremental approach for intra-period tax allocation as well as two exceptions related to accounting for outside basis differences of equity method investments and foreign subsidiaries. The ASU also amends the scope of ASC 740 related to a franchise tax (or similar tax) that is partially based on income; clarifies when a step-up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction; specifies that an entity is not required to allocate income tax expense to a legal entity that is both not subject to tax and disregarded by the taxing authority; and clarifies that all tax effects, both deferred and current, should be accounted for in the interim period that includes the enactment date. The Company adopted this ASU on January 1, 2021, and there was no material impact on the financial statements upon adoption of this ASU.

4. Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period. Diluted net loss per share is calculated using the weighted-average number of common shares outstanding, plus potential dilutive common stock during the period. Diluted net loss per share is the same as basic net loss per share since the effect of the potentially dilutive securities is anti-dilutive.

The following weighted-average outstanding shares of potentially dilutive securities are excluded from the computation of diluted net loss per share for the periods presented, because including them would have been anti-dilutive:

	Year Ended December 31,		
	2021	2020	2019
Options, RSUs and ESPP to purchase common stock	11,987,362	11,388,691	9,687,844

5. Fair Value Measurements and Investments

In accordance with Accounting Standards Codification ("ASC") 820-10, Fair Value Measurements and Disclosures, the Company determines the fair value of financial and non-financial assets and liabilities using the fair value hierarchy, which establishes three levels of inputs that may be used to measure fair value, as follows:

- Level I: Inputs which include quoted prices in active markets for identical assets and liabilities.
- Level II: Inputs other than Level I that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level III: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The carrying amounts of the Company's financial instruments, including restricted cash, accounts receivable, accounts payable and accrued liabilities approximate fair value due to their relatively short maturities. The Company's financial instruments consist of Level I assets which consist primarily of highly liquid money market funds, some of which are included in restricted cash; and U.S. government bonds that are included in short-term investments.

The following tables set forth the fair value of the Company's investments subject to fair value measurements on a recurring basis and the level of inputs used in such measurements:

		December 31, 2021				
	Valuation Hierarchy	Amortized Cost	Allowance for Credit Losses	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Aggregate Fair Value
				(in thousands)		
Assets						
Money market funds	Level I	165,736	$ —	$ —	$ —	$ 165,736
Restricted cash (money market funds)	Level I	917	—	—	—	917
U.S. Government bonds	Level I	99,938	—	—	(242)	99,696
Total Securities		266,591	$ —	$ —	$ (242)	$ 266,349

		December 31, 2020				
	Valuation Hierarchy	Amortized Cost	Allowance for Credit Losses	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Aggregate Fair Value
				(in thousands)		
Assets						
Money market funds	Level I	$ 131,121	$ —	$ —	$ —	$ 131,121
Restricted cash (money market funds)	Level I	917	—	—	—	917
U.S. Government bonds	Level I	124,254	—	6	—	124,260
Total securities		$ 256,292	$ —	$ 6	$ —	$ 256,298

No securities have contractual maturities of greater than twelve months.

As of December 31,2021, the unrealized loss on the Company's investment in US Government bonds were caused by interest rate changes and were not attributable to credit losses. The remaining contractual terms of those investments are less than a year. The Company does not intend to sell the investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases.

6. Property and Equipment

Property and equipment, net consisted of the following:

	December 31	
	2021	2020
	(in thousands)	
Machinery and equipment	$ 15,086	$ 13,772
Computer equipment and software	1,608	1,600
Furniture and fixtures	1,054	1,024
Leasehold improvements	1,736	1,728
Construction in progress	308	252
	19,792	18,376
Less: accumulated depreciation and amortization	(13,832)	(11,426)
	$ 5,960	$ 6,950

Depreciation and amortization expense was $2.6 million, $2.4 million and $2.5 million for the years ended December 31, 2021, 2020, and 2019, respectively.

7. Intangible Assets

The intangible asset is being amortized over the estimated lives of the patents which average 12 years. The amortization expense for the years ended December 31, 2021, 2020, and 2019 was $0.1 million, $0.1 million and $0.1 million, respectively.

	December 31,	
	2021	2020
	(in thousands)	
Probody platform intangible asset	$ 1,750	$ 1,750
Less accumulated amortization	(729)	(583)
	$ 1,021	$ 1,167

8. Accrued Liabilities

Accrued liabilities consisted of the following:

	December 31,	
	2021	2020
	(in thousands)	
Research and clinical expenses	$ 18,861	$ 10,092
Payroll and related expenses	9,576	8,362
Legal and professional expenses	1,468	815
Operating lease liabilities - short term	3,618	3,195
Other accrued expenses	713	595
Total	$ 34,236	$ 23,059

9. Research and Collaboration Agreements

The following table summarizes the revenue by collaboration partners:

	Year Ended December 31,		
	2021	2020	2019
	(in thousands)		
AbbVie	$ 11,845	$ 38,192	$ 5,878
Amgen	8,744	8,609	3,871
Astellas	19,365	13,931	—
Bristol Myers Squibb	29,619	39,630	47,740
Total revenue	$ 69,573	$ 100,362	$ 57,489

AbbVie Ireland Unlimited Company

In April 2016, the Company and AbbVie entered into two agreements, a CD71 Co-Development and Licensing Agreement (the "CD71 Agreement") and a Discovery Collaboration and Licensing Agreement (as amended and restated in June 2019, the "Discovery Agreement" and together with the CD71 Agreement the "AbbVie Agreements"). Under the terms of the CD71 Agreement, the Company and AbbVie will co-develop a conditionally activated antibody-drug conjugate ("ADC") against CD71, with the Company responsible for preclinical and early clinical development. AbbVie will be responsible for later development and commercialization, with global late-stage development costs shared between the two companies. The Company will assume 35% of the net profits or net losses related to later development and commercialization unless it opts-out. If the Company opts-out from participation of co-development of the CD71 conditionally activated ADC, which includes CX-2029, AbbVie will have sole right and responsibility for the further development, manufacturing and commercialization of such CD71 conditionally activated ADC.

Under the CD71 Agreement, the Company received an upfront payment of $20.0 million in April 2016, and was eligible to initially receive up to $470.0 million in development, regulatory and commercial milestone payments, a 35% profit split on U.S. sales, and royalties on ex-U.S. sales at percentages in the high teens to low twenties if the Company participates in the co-development of the CD71 conditionally activated ADC subject to a reversion to a royalty on U.S. sales, and reduction in royalties on ex-U.S. sales, if the Company opts-out from the co-development of the CD71 conditionally activated ADC. The Company's share of later stage co-development costs for each CD71 conditionally activated ADC is capped, provided that AbbVie may offset the Company's co-development cost above the capped amounts from future payments such as milestone payments and royalties. In March 2020, the Company earned a $40.0 million milestone payment for satisfying the CD71 dose escalation success criteria under the CD71 Agreement. Inclusive of the 2017, 2018 and 2020 milestone payments, as of December 31, 2021, the Company has received in aggregate $100.0 million in milestone payments under the agreement.

Under the terms of the Discovery Agreement, AbbVie receives exclusive worldwide rights to develop and commercialize conditionally activated ADCs against up to two targets, one of which was selected in March 2017. The Company shall perform research services to discover the Probody therapeutics and create conditionally activated ADCs for the nominated collaboration targets. From that point, AbbVie shall have sole right and responsibility for development and commercialization of products comprising or containing such conditionally activated ADCs ("Discovery Licensed Products").

Under the Discovery Agreement, the Company received an upfront payment of $10.0 million in April 2016 and subsequently earned an additional $10.0 million milestone payment triggered by selection of the second target by AbbVie in June 2019. The Company is also eligible to receive up to $265.0 million for each target, in development, regulatory and commercial milestone payments and royalties at percentages in the high single to low teens from commercial sales of any resulting conditionally activated ADCs. The second target was selected under the Discovery Agreement that allows AbbVie to select a target for developing a conditionally activated ADC or a Probody.

The Company has determined that the AbbVie Agreements should be combined and evaluated as a single arrangement in determining revenue recognition, because both agreements were concurrently negotiated and executed. Therefore, the Company concluded that there are two distinct performance obligations:

(1) the CD71 Agreement performance obligation consisting of the CD71 Agreement research, development and commercialization license, related research service and participation in the joint research committee, and

(2) the Discovery Agreement performance obligation consisting of the Discovery Agreement research, development and commercialization license, related research service and participation in the joint research committee.

The total transaction price for the Discovery Agreement and CD71 Agreement, collectively, upon adoption of ASC 606 on January 1, 2018 of $39.8 million consists of $30.0 million in upfront payments, and a $14.0 million milestone payment received under the CD71 Agreement (net of the payment of an associated sublicense fee of $1.0 million to SGEN), less $4.2 million of estimated sublicense fees. The upfront payments under the AbbVie Agreements were allocated between the two performance obligations based on the estimated relative standalone selling prices. The $30.0 million of upfront payments was allocated $20.0 million to the CD71 Agreement, with the remaining $10.0 million allocated to the Discovery Agreement. The $14.0 million milestone payment received (net of the payment of an associated sublicense fee of $1.0 million to SGEN) and the estimated sublicense fees of $4.2 million were allocated to the CD71 Agreement performance obligation as they are directly related to the development of the CX-2029.

Therefore, of the $39.8 million total initial transaction price discussed above, the Company allocated $29.8 million to the CD71 Agreement performance obligation and recognized revenue using a cost-based input measure. In applying the cost-based input method, revenue is recognized based on actual FTE hours incurred as a percentage of total estimated FTE hours for completing the combined performance obligation over the estimated service period. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. During 2019, as a result of ongoing dose escalation in the continued development program, there was a change in estimate of the research service period as well as an increase in the projected FTE hours-to-completion. As of December 31, 2021, the research service period for the CD71 Agreement performance obligation was extended during the course of the arrangement from April 2021 to March 2023.

The remaining $10.0 million of the total initial transaction price of $39.8 million allocated to the Discovery Agreement performance obligation represents an obligation to continuously make the Company's Probody therapeutic technology platform available to AbbVie. The $10.0 million was initially recognized on a straight-line basis over five years, which represented the estimated research service period for the first target, through April 2021 using the time-elapsed input method. During the fourth quarter of 2020, the Company extended the estimated research service period for this first target for an additional twelve months from April 2021 to April 2022.

In May 2018, the Company earned a $21.0 million milestone payment (net of the payment of an associated sublicense fee of $4.0 million to SGEN) under the CD71 Agreement. The $21.0 million milestone payment was included as part of the transaction price in May 2018 and a revenue adjustment of $9.9 million was recognized in the second quarter of 2018 reflecting the percentage completed to-date on the project related to this milestone.

In June 2019, the Company earned a $10.0 million milestone payment for the second target selected by AbbVie under the Discovery Agreement. It is recognized also using the time-elapse measure of progress of the related obligation and straight line over the estimated research service period of five years through June 2024.

The $40.0 million milestone payment earned in March 2020 for satisfying the CD71 dose escalation success criteria under the CD71 Agreement was unconstrained and included as part of the transaction price during the first quarter of 2020 and $26.6 million was recognized as revenue related to this milestone reflecting the percentage completed to-date on the project as of March 2020. The remainder is being recognized as revenue over the remaining estimated research service period through March 2023.

The Company determined that the remaining potential milestone payments of both agreements, if recognized, are probable of significant revenue reversal as their achievement is highly dependent on factors outside the Company's control. Therefore, these payments continue to be fully constrained and are not included in the transaction price as of December 31, 2021.

As of December 31, 2021 and 2020, deferred revenue related to the CD71 Agreement performance obligation was $16.1 million and $25.2 million, respectively, and deferred revenue related to the Discovery Agreement performance obligation was $5.2 million and $8.0 million, respectively.

Amgen, Inc.

On September 29, 2017, the Company and Amgen, Inc. ("Amgen") entered into a Collaboration and License Agreement (the "Amgen Agreement"). Pursuant to the Amgen Agreement, the Company received an upfront payment of $40.0 million in October 2017. Concurrent with the Amgen Agreement, the Company and Amgen entered into a Share Purchase Agreement pursuant to which Amgen purchased 1,156,069 shares of the Company's common stock at a price of $17.30 per share for total proceeds of $20.0 million.

In October 2021, CytomX and Amgen executed an amendment to the Amgen Agreement primarily to (1) extend the target selection date for Amgen to select its additional targets for research and development, and (2) reduce the total number of milestone events and increase the total amount of milestone payments for EGFR Products.

Under the terms of the Amgen Agreement, as amended, the Company and Amgen will co-develop a conditionally activated T-cell engaging bispecific therapeutic targeting epidermal growth factor receptor (the "EGFR Products"). The Company is responsible for early-stage development of EGFR Products and Amgen will be responsible for late-stage development and commercialization of EGFR Products. Following early-stage development, the Company will have the right to elect to participate financially in the global co-development of EGFR Products with Amgen, during which the Company would bear certain of the worldwide development costs for EGFR Products and Amgen would bear the rest of such costs (the "EGFR Co-Development Option"). If the Company exercises its EGFR Co-Development Option, the Company will share in somewhat less than 50% of the profit and losses from sales of such EGFR Products in the U.S., subject to certain caps, offsets, and deferrals. If the Company chooses not to exercise its EGFR Co-Development

Option, the Company will not bear any costs of later stage development. The Company is also eligible to receive up to $460.0 million in development, regulatory, and commercial milestone payments for EGFR Products, and royalties in the low-double-digit to mid-teen percentage of worldwide commercial sales, provided that if the Company exercises its EGFR Co-Development option, it shall receive a profit and loss split of sales in the United States and royalties in the low-double-digit to mid-teen percentage of commercial sales outside of the United States.

Amgen also has the right to select a total of up to three targets, including the two additional targets discussed below. The Company and Amgen collaborate in the research and development of conditionally activated T-cell engaging bispecifics products directed against such targets. Amgen has selected one such target (the "Amgen Other Product"). If Amgen exercises its option within a specified period of time, it can select two such additional targets (the "Amgen Option Products" and, together with the Amgen Other Product, the "Amgen Products"). Except with respect to preclinical activities to be conducted by CytomX, Amgen will be responsible, at its expense, for the development, manufacture, and commercialization of all Amgen Products. If Amgen exercises all of its options and advances all three of the Amgen Products, CytomX was initially eligible to receive up to $950.0 million in upfront, development, regulatory, and commercial milestones and tiered high single-digit to low-teen percentage royalties. The Company concluded that, at the inception of the agreement, Amgen's option to select the two additional targets is not a material right and does not represent a performance obligation of the agreement.

At the initiation of the collaboration, CytomX had the option to select, from programs specified in the Amgen Agreement, an existing preclinical stage T-cell engaging bispecific product from the Amgen preclinical pipeline. In March 2018, CytomX selected the program. CytomX is responsible, at its expense, for converting this program to a conditionally activated T-cell engaging bispecific product, and thereafter, will be responsible for development, manufacturing, and commercialization of the product ("CytomX Product"). Amgen is eligible to receive up to $203.0 million in development, regulatory, and commercial milestone payments for the CytomX Product, and tiered mid-single digit to low double-digit percentage royalties.

The Company considered the criteria for combining contracts in ASC 606 and determined that the Amgen Agreement and the Purchase Agreement should be combined into one contract. The Company accounted for the Amgen Agreement based on the fair values of the assets and services exchanged.

The Company identified the following promised goods and services at the inception of the Amgen Agreement:

(1) the research, development and commercialization license,

(2) the research and development services for the EGFR Products and the Amgen Other Product, and

(3) the obligation to participate in the joint steering committee ("JSC") and the joint research committee ("JRC").

For each of the EGFR Products and the Amgen Other Products, the Company determined that the respective promised goods and services identified are not distinct from the related research and development services. Therefore the identified promised goods and services were combined into one single performance obligation for each of the EGFR Product and the Amgen Other Products.

Furthermore, the Amgen Other Products are accounted for as a separate performance obligation from the EGFR Products as the nature of the services being performed is not the same and the value that Amgen can derive from one program is not dependent on the success of the other. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Concurrent with the execution of the Amgen Agreement, the Company entered into a sublicense agreement whereby the Company granted Amgen a sublicense of its rights to one patent family that it co-owns with UCSB, that is exclusively licensed to the Company under the UCSB Agreement covering Probody antibodies and other pro-proteins in the fields of therapeutics, in vivo diagnostics and prophylactics. This sublicense was incremental to the patents, patent applications and know-how covering conditionally activated T-cell engaging bispecific molecules that were developed and owned by the Company and licensed to Amgen. Under the UCSB Agreement, as amended, the Company is obligated to make a sublicense payment to UCSB equal to up to 7.5% of certain upfront and milestone payments owed to or received by the Company.

The total transaction price of $51.2 million, consisting of the $40.0 million upfront payment, an estimated fair value of $10.7 million for the CytomX Product and $0.5 million of premium on the sale of the Company's common stock, was allocated between the two performance obligations based on the relative standalone selling price of each performance obligation. To determine the standalone selling price, the Company used the discounted cash flow method by calculating risk-adjusted net present values of estimated cash flows. The Company determined that the remaining potential milestone payments were fully constrained due to the uncertainty in achieving them as of December 31, 2021.

Of the $51.2 million total transaction price, the Company allocated $46.4 million to the EGFR Products performance obligation and $4.8 million to the Amgen Other Product performance obligations. The transaction price of the EGFR Product performance obligation was recognized using a cost-based input measure. In applying the cost-based input method of revenue recognition, the Company uses actual FTE hours incurred relative to estimated total FTE hours expected to be incurred for the combined performance obligation over the research service period. At the end of the second quarter of 2019, the Company determined that it will undertake additional testing and assessment of the molecules being evaluated under the EGFR project. As a result, the estimated FTE hours-to-completion and research service period were increased to eight years. In the second quarter of 2020, the Company completed the clinical candidate characterization phase and has moved into the IND-enabling phase earlier than planned. As a result, the estimated FTE hours-to-completion and research service period were decreased from eight to approximately seven years.

The $4.8 million transaction price allocated to the Amgen Other Product performance obligation represents an obligation to continuously make the Probody therapeutic technology platform available to Amgen, which is recognized over the common measure of progress for the entire performance obligation over the estimated research service period of six years.

As of December 31, 2021 and 2020 deferred revenue related to the EGFR Products performance obligation was $21.8 million and $29.8 million, respectively. As of December 31, 2021 and 2020, deferred revenue related to the Amgen Other Products performance obligation was $1.4 million and $2.2 million, respectively.

Astellas Pharma Inc.

The Company and Astellas Pharma, Inc. ("Astellas") entered into a Collaboration and License Agreement (the "Astellas Agreement") on March 23, 2020, the effective date, to collaborate on preclinical research activities to discover and develop certain antibody compounds for the treatment of cancer using the Company's Probody therapeutic technology.

Under the terms of the Astellas Agreement, the Company granted Astellas an exclusive, worldwide right to develop and commercialize Probody therapeutics for up to four collaboration targets including one initial target and three additional targets ("Additional Targets"). In addition, Astellas has the right to expand the number of Additional Targets from three up to five (the "Expansion Option") before the third anniversary of the effective date. Furthermore, for a specified number of targets, at a pre-specified time prior to the initiation of the first pivotal study of a product against such target, the Company may elect to participate in certain development costs and share in the profits generated in the United States with respect to such product ("Cost Share Option"). The Cost Share Option, if exercised, will also provide the option for the Company to co-commercialize such product in the United States. The Company does not consider the Cost Share Option as a performance obligation at the inception of the agreement as the participation is at the Company's discretion.

Pursuant to the Astellas Agreement, the consideration from Astellas is comprised of an upfront fee of $80.0 million and contingent payments for development, regulatory and sales milestones of up to an aggregate of approximately $1.6 billion. If Astellas exercises its Expansion Option for the two Additional Targets, the Company would be eligible to receive additional upfront and milestone payments aggregating to approximately $0.9 billion. The Company is also entitled to tiered royalties from high-single digit to mid-teen percentage royalties from potential future sales. Astellas is responsible for all preclinical research costs incurred by either party as set forth in the preclinical research plan and the Company will receive research and development service fees based on a prescribed FTE rate.

The Company determined that the license and expertise related to the development of the product candidates should be combined with the research and development services and participation in the joint research committee as one combined performance obligation. The Company concluded, that at the inception of the agreement, Astellas' Expansion Option for two Additional Targets were not material rights and therefore not considered performance obligations. As such, each option will be accounted for as a separate arrangement upon exercise.

The initial transaction price of $90.0 million consists of the upfront fee of $80.0 million and research and development service fees of $10.0 million. The Company determined that all potential milestone payments are constrained as of December 31, 2021 due to the significant uncertainty of achievement.

The upfront fee of $80.0 million for the combined obligation to continuously make the Probody therapeutic technology platform available to Astellas is recognized on a straight-line basis for the entire performance obligation over the estimated research service period of five years, which ends in March 2025. The research and development service fees, estimated to be $10.0 million, will be recognized when services are provided based on the prescribed FTE rate.

As of December 31, 2021 and 2020, deferred revenue relating to the Astellas Agreement was $51.6 million and $67.6 million, respectively. The amount due from Astellas under the Astellas Agreement was $0.8 million and $0.8 million as of December 31, 2021 and 2020, respectively.

Bristol Myers Squibb Company

On May 23, 2014, the Company and Bristol Myers Squibb Company ("Bristol Myers Squibb") entered into a Collaboration and License Agreement (the "BMS Agreement") to discover and develop compounds for use in human therapeutics aimed at multiple immuno-oncology targets using the Company's Probody therapeutic technology. The effective date of the BMS Agreement was July 7, 2014.

Under the terms of the BMS Agreement, the Company granted Bristol Myers Squibb exclusive worldwide rights to develop and commercialize Probody therapeutics for up to four oncology targets. Bristol Myers Squibb had additional rights to substitute up to two collaboration targets within three years of the effective date of the BMS Agreement. These rights expired in May 2017. Each collaboration target had a two-year research term and the two additional targets had to be nominated by Bristol Myers Squibb within five years of the effective date of the BMS Agreement. The research term for each collaboration target could be extended in one year increments up to three times.

Pursuant to the BMS Agreement, the financial consideration from Bristol Myers Squibb was comprised of an upfront payment of $50.0 million, and the Company was initially entitled to receive contingent payments of up to $25.0 million for additional targets and up to an aggregate of $1,192.0 million for development, regulatory and sales milestones. In addition, the Company was entitled to royalty payments in the mid-single digits to low double-digit percentages from potential future sales. The Company also received research and development service fees based on a prescribed FTE rate that was capped.

The Company identified the following promised goods and services at the inception of the BMS Agreement:

(1) the exclusive research, development and commercialization license;

(2) the research and development services; and

(3) the obligation to participate in the joint research committee.

The Company determined that the license, the Company's research services and expertise related to the development of the product candidates should be combined with the research services and participation in the joint research committee as one combined performance obligation. Additionally, the Company considered whether the services performed for each of the two targets selected under the BMS Agreement should be considered as separate performance obligations and concluded that both targets should be accounted for as one combined stand-ready performance obligation.

The Company also concluded that, at the inception of the agreement, Bristol Myers Squibb's options for the third and fourth targets were not material rights and not performance obligations. As such, each option was accounted for as a separate arrangement upon exercise.

The Company received an upfront payment of $50.0 million from Bristol Myers Squibb in July 2014. In January and December 2016, Bristol Myers Squibb exercised the option to select the third and fourth targets, and paid the Company $10.0 million and $15.0 million, respectively, pursuant to the terms of the BMS Agreement. In December 2016, Bristol Myers Squibb selected a clinical candidate pursuant to the BMS Agreement, which triggered a $2.0 million pre-clinical milestone payment to the Company. In November 2017, the Company recognized a $10.0 million milestone payment from Bristol Myers Squibb upon approval of the investigational new drug application for the CTLA-4-directed Probody therapeutic.

On March 17, 2017, the Company and Bristol Myers Squibb entered into Amendment Number 1 to Extend Collaboration and License Agreement ("Amendment 1"). Amendment 1 granted Bristol Myers Squibb exclusive worldwide rights to develop and commercialize Probody therapeutics for up to eight additional targets. The effective date of Amendment 1 was April 25, 2017 ("Amendment Effective Date"). Under the terms of Amendment 1, the Company continued to have obligations to Bristol Myers Squibb to discover and conduct preclinical development of Probody therapeutics against any targets they chose to select during the research period under the terms of Amendment 1.

Pursuant to Amendment 1, the financial consideration from Bristol Myers Squibb was comprised of an upfront payment of $200.0 million and the Company was initially eligible to receive contingent payments for development, regulatory and sales milestones of up to an aggregate of $3,586.0 million for the eight targets. The Company was also entitled to tiered mid-single to low double-digit percentage royalties from potential future sales. Amendment 1 did not change the term of the Bristol Myers Squibb's royalty obligation under the BMS Agreement. Bristol Myers Squibb's royalty obligation continues on a licensed-product by licensed-product basis until the later of (i) the expiration of the last claim of the licensed patents covering the licensed products in the country, (ii) the twelfth anniversary of the first commercial sale of a licensed product in a country, or (iii) the expiration of any applicable regulatory, pediatric, orphan drug or data exclusivity with respect to such product.

The initial transaction price for the BMS Agreement and Amendment 1, collectively, was $272.8 million consisting of the upfront fees of $250.0 million, research and development service fees of $10.8 million and milestone payments received to date of $12.0 million. The Company determined that the remaining potential milestone payments were probable of significant revenue reversal as their achievement was highly dependent on factors outside the Company's control. Therefore, these payments were fully constrained and were not included in the transaction price upon the adoption of ASC 606 on January 1, 2018. The BMS Agreement represents an obligation to continuously make the Probody therapeutic technology platform available to Bristol Myers Squibb. Therefore, the initial transaction price is recognized over the estimated research service period, which ends on April 25, 2025.

During the first quarter of 2019, Bristol Myers Squibb terminated pre-clinical activities on three of the first four collaboration targets selected under the original 2014 BMS Agreement. The first and second targets under the BMS Agreement were combined into a single performance obligation. The Company determined that termination of pre-clinical activities on the second target does not impact the Company's continuing obligation to Bristol Myers Squibb for the first target, CTLA-4, as it is still being actively developed by Bristol Myers Squibb. Therefore, the Company concluded that it will continue to amortize the related deferred revenue over the original performance period. The Company has determined that upon the termination of pre-clinical activities on the third and the fourth collaboration targets selected by Bristol Myers Squibb in January and December of 2016, respectively, under the BMS Agreement, it has no further obligations. As a result of termination of three of the four collaboration targets, the Company is no longer eligible to receive up to an aggregate of $894.0 million contingent payments for development, regulatory and sales milestones as well as the related royalty payments for such targets. As a result, the Company recognized $18.1 million of revenue for the third and fourth targets in the first quarter of 2019, of which $17.4 million represented the accelerated recognition of all of the related deferred revenue upon the effective date of termination. The Company continues to be obligated to perform research work under Amendment 1 executed in March 2017.

In February 2020, Bristol Myers Squibb dosed the first patient in the Part 2 cohort expansion portion of its ongoing BMS-986249 clinical study for the CTLA-4 program, which triggered a $10.0 million milestone payment to the Company pursuant to the terms of the BMS Agreement. The $10.0 million milestone payment was recognized as revenue in the first quarter of 2020.

In February 2021, the Company and Bristol Myers Squibb entered into Amendment Number 2 to amend the Collaboration and License Agreement ("Amendment 2"), as amended by Amendment 1. Subsequent to Amendment 2, Bristol Myers Squibb has the exclusive worldwide rights to develop and commercialize Probody therapeutics for up to five oncology targets. Under the terms of Amendment 2, the period for target selection has been extended and the Company will continue to collaborate with Bristol Myers Squibb to discover and conduct preclinical development of Probody therapeutics against targets selected by Bristol Myers Squibb over the estimated research period, which ends in April 2025. Pursuant to Amendment 2, the Company is eligible to receive contingent payments for development, regulatory and sales milestones of up to an aggregate of $1,779.0 million. It is also entitled to tiered mid-single to low double-digit percentage of royalties from potential future sales. In addition, the Company will no longer be entitled to receive the research and development service fee as part of the arrangement.

The Company reevaluated the remaining potential milestone payments and determined that significant revenue reversal was still probable as the achievement of such milestones was highly dependent on factors outside the Company's control. As a result, these payments continued to be fully constrained and were not included in the transaction price on December 31, 2021.

As of December 31, 2021 and 2020, deferred revenue relating to the BMS Agreement was $98.8 million and $128.3 million, respectively.

ImmunoGen, Inc.

In January 2014, the Company and ImmunoGen, Inc. ("ImmunoGen") entered into the Research Collaboration Agreement (the "ImmunoGen Research Agreement"). The ImmunoGen Research Agreement provided the Company with the right to use ImmunoGen's Antibody Drug Conjugate ("ADC") technology in combination with the Company's Probody therapeutic technology to create a conditionally activated ADC directed at one specified target under a research license, and to subsequently obtain an exclusive, worldwide development and commercialization license to use ImmunoGen's ADC technology to develop and commercialize such conditionally activated ADCs. The Company made no upfront cash payment in connection with the execution of the agreement. Instead, the Company provided ImmunoGen with the rights to CytomX's Probody therapeutic technology to create conditionally activated ADCs directed at two targets under the ImmunoGen Research Agreement and to subsequently obtain exclusive, worldwide development and commercialization licenses to develop and commercialize such conditionally activated ADCs. In February 2016, the Company exercised its option to obtain a development and commercialization license for praluzatamab ravtansine (CX-2009) pursuant to the terms of the ImmunoGen Research Agreement (the "CX-2009 License").

In December 2019, the parties entered into a license agreement (the "ImmunoGen 2019 License") pursuant to which the ImmunoGen Research Agreement (the "ImmunoGen 2017 License") for a target selected in December 2017, was terminated and ImmunoGen granted a license for all of ImmunoGen's rights under the ImmunoGen 2017 License to the Company. See Note 10. License Agreement, for more information.

In February 2020, the Company dosed the first patient in the praluzatamab ravtansine Phase 2 clinical trial and triggered a $3.0 million milestone payment to ImmunoGen pursuant to the CX-2009 License which continued to remain in effect following the termination of the ImmunoGen 2017 License in December 2019. The Company recorded a $3.0 million charge to research and development expense for the first quarter of 2020, in connection with this milestone payment to ImmunoGen.

Contract Liabilities

The following table presents changes in the Company's total contract liabilities for the year ended December 31, 2021 (in thousands):

	Balance at 12/31/2020	Additions	Deductions	Balance at 12/31/2021
		(in thousands)		
Contract liabilities:				
Deferred revenue	$ 261,130	$ -	$ 66,208	$ 194,922

The Company expects that the $194.9 million of deferred revenue related to the following contracts as of December 31, 2021 will be recognized as revenue as set forth below. However, the timing of revenue recognition could differ from the estimates depending on facts and circumstances impacting the various contracts, including progress of research and development, resources assigned to the contracts by the Company or its collaboration partners or other factors outside of the Company's control.

- The $16.1 million of deferred revenue related to the CD71 Agreement with AbbVie is expected to be recognized based on actual FTE effort and program progress until 2023.
- The $0.2 million of deferred revenue related to the first target under the Discovery Agreement with AbbVie is expected to be recognized ratably until 2022.
- The $5.0 million of deferred revenue related to the second target under the Discovery Agreement with AbbVie is expected to be recognized ratably until 2024.
- The $21.8 million of deferred revenue related to the Amgen EGFR Products is expected to be recognized based on actual FTE effort and program progress until 2024.
- The $1.4 million of deferred revenue related to the Amgen Other Products is expected to be recognized ratably until 2023.
- The $51.6 million of deferred revenue related to the Astellas Agreement is expected to be recognized ratably until 2025.
- The $98.8 million of deferred revenue related to the BMS Agreement is expected to be recognized ratably until 2025.

10. License Agreement

UCSB

The Company has an exclusive, worldwide license agreement with UCSB (the "UCSB Agreement"), relating to the use of certain patents and technology relating to its core technology, including its therapeutic antibodies, and to certain patent rights the Company co-owns with UCSB covering Probody antibodies and other pro-proteins.

Pursuant to the UCSB Agreement, the Company is obligated to (i) make royalty payments to UCSB on net sales of its products covered under the agreement, subject to annual minimum amounts, (ii) make milestone payments to UCSB upon the occurrence of certain events, (iii) make a milestone payment to UCSB upon occurrence of an IPO or change of control, and (iv) reimburse UCSB for prosecution and maintenance of the licensed patents. If the Company sublicenses its rights under the UCSB Agreement, it is obligated to pay UCSB a percentage of the total sublicense revenue received, which total amount would be first reduced by the aggregate amount of certain research and development related expenses incurred by the Company and other permitted deductions. As part of the UCSB Agreement, the Company has annual minimum royalty obligations of $0.2 million under the terms of certain exclusive licensed patent rights. The royalty obligations are cancellable any time by giving notice to the licensor, with the termination being effective 60 days after giving notice.

In April 2019, the Company entered into Amendment No.3 to the UCSB Agreement to adjust and clarify certain sublicense terms ("Amendment No.3"). In connection with the amendment, the Company issued to UCSB 150,000 shares of CytomX common stock with a fair value of $10.68 per share. Under the terms of Amendment No.3, the Company and UCSB agreed to modify the determination of sublicense revenues payable by the Company to UCSB on certain existing collaboration agreements and on collaboration agreements executed subsequent to Amendment No.3. In exchange, the Company agreed to make an upfront payment of $1.0 million as well as additional annual license maintenance fees of $0.8 million through 2031. In the event that the Company terminates the agreement due to material concern of the safety or efficacy of the related technology, 50% of all remaining maintenance fees will become due immediately. Otherwise, all remaining maintenance fees will become due immediately upon early termination of the agreement unless there is a material breach by UCSB. Pursuant to Amendment No.3, the Company recorded in research and development expense a charge of $3.4 million relating to sublicense and maintenance fees representing the 150,000 shares issued with a fair value of $1.6 million, the upfront payment of $1.0 million and the additional annual maintenance fee of $0.8 million during the second quarter of 2019.

In June 2019, the Company incurred an additional $0.8 million of sublicense fees related to the $10.0 million milestone payment for the second target selected by AbbVie under the Discovery Agreement.

In February 2020, the Company recorded $0.8 million of sublicense fees triggered by the $10.0 million milestone payment from Bristol Myers Squibb's dosing of the first patient in the Part 2 cohort expansion portion of its ongoing BMS-986249 clinical study for the CTLA-4 program. In March 2020, the Company incurred additional sublicense fees of $6.0 million related to the $80.0 million upfront fee received pursuant to the Astellas Agreement entered into in March 2020, and $1.4 million related to the $40.0 million milestone payment from AbbVie for satisfying the CD71 dose escalation success criteria under the CD71 Agreement in March 2020.

During the years ended December 31, 2021, 2020, and 2019, the Company incurred sublicense expenses of $1.0 million, $9.1 million, and $4.3 million, respectively, under the provisions of the UCSB Agreement.

ImmunoGen

In December 2019, the Company entered into a License Agreement (the "ImmunoGen 2019 License") with ImmunoGen, Inc. to obtain an exclusive license with respect to epithelial cell adhesion molecule ("EPCAM"). Under the ImmunoGen 2019 License, ImmunoGen agreed to transfer its know-how, patents, intellectual property rights, and technology transfer materials and information related to its EpCAM program. The license gives the Company the sole ability to develop, manufacture, use and commercialize any licensed product that incorporates, is comprised of, or otherwise derived from a Probody that targets EpCAM in any human therapeutic field on a worldwide basis. In exchange, the Company agreed to make non-refundable and non-creditable payments including an upfront license payment of $7.5 million and certain clinical development, approval and commercialization milestone payments, if achieved and royalties on product sales. The upfront license fee of $7.5 million was recorded as research and development expense in December 2019.

11. Commitments and Contingencies

Legal Proceedings

On March 4, 2020, Vytacera Bio, LLC filed a patent infringement lawsuit against the Company in the U.S. District Court for the District of Delaware. The lawsuit alleges that the Company's use, offers to sell, and/or sales of the Probody® technology platform for basic research applications constitutes infringement. The complaint seeks unspecified monetary damages. The Company filed an Answer, Affirmative Defenses, and Counterclaims on May 26, 2020. Vytacera Bio, LLC filed its Answer to CytomX Therapeutics Inc.'s Counterclaims on June 5, 2020. On October 13, 2021, the Court granted the parties' stipulation to stay all pending case deadlines except for certain matters. All case deadlines are stayed until the Court resolves the parties' claim construction disputes. The Company believes that the lawsuit is without merit and intends to vigorously defend itself , and has not recorded any amount for claims associated with this lawsuit as of December 31, 2021.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance.

12. Leases

Operating Lease

In December 2015, the Company entered into a lease (the "2016 Lease") of office and laboratory space located in South San Francisco, California for the Company's corporate headquarters. The 2016 Lease has an initial term of ten years through 2026 and the Company has an option to extend the initial term for an additional five years at the then fair rental value as determined pursuant to the 2016 Lease.

In addition, the Company obtained a standby letter of credit (the "Letter of Credit") in an amount of approximately $0.9 million, which may be drawn by the Landlord to be applied for certain purposes upon the Company's breach of any provisions under the 2016 Lease. The Company has recorded the $0.9 million of cash securing the Letter of Credit as non-current restricted cash on its balance sheet as of December 31, 2021 and 2020. Rent expense during the years ended December 31, 2021, 2020, and 2019 was $5.1 million, $5.1 million and $4.8 million, respectively.

Supplemental information related to leases are as follows:

	Year Ended	
	December 31, 2021	December 31, 2020
	(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 5,129	$ 4,990

	December 31, 2021	December 31, 2020
	(in thousands)	
Supplemental balance sheet information related to leases:		
Operating lease right-of-use assets	$ 19,362	$ 22,495
Current operating lease liabilities	3,618	3,195
Non-current operating lease liabilities	18,056	21,675
Total operating lease liabilities	$ 21,674	$ 24,870
Weighted-average remaining lease term (in years)		
Operating lease	4.75	5.75
Weighted-average discount rate		
Operating lease	8.25%	8.25%

	December 31, 2021
	(in thousands)
Maturity of operating lease liabilities	
2022	5,273
2023	5,420
2024	5,572
2025	5,729
2026 and beyond	4,387
Total lease payments	26,381
Less imputed interest	(4,707)
Present value of lease liabilities	$ 21,674

13. Common Stock

In February 2020, the Company entered into an Open Market Sale Agreement (the "Sales Agreement") with Jefferies LLC ("Jefferies"), to sell shares of the Company's common stock, par value $0.00001 per share, with aggregate gross sales proceeds of up to $75,000,000, from time to time upon the Company's request, through an at the market offering under which Jefferies will act as sales agent. Pursuant to the Sales Agreement, Jefferies as the sales agent will receive a commission of 3.0% of the gross sales price for shares of common stock sold under the Sales Agreement. During December 2020, the Company sold 1,535,217 shares at an average price of $7.62 per shares and received net proceeds of approximately $11.3 million after deducting the 3.0% sales commission and related issuance cost.

In January 2021, the Company completed an underwritten public offering of 14,285,714 shares of common stock at a price of $7.00 per share. The aggregate net proceeds received by the Company from the offering were approximately $93.6 million, after deducting underwriting discounts and commissions and offering expenses of $6.4 million. The Company also granted the underwriters the option for 30 days to purchase up to 2,142,857 additional shares of common stock at the public offering price, less the underwriting discounts and commissions. In February 2021, the underwriters exercised the option in full which resulted in additional net proceeds of $14.1 million to the Company, after deducting the underwriting discounts and commissions of $0.9 million.

14. Stock-based Compensation

The 2010 Plan and 2011 Plan

In 2010, the Company adopted its 2010 Stock Incentive Plan (the "2010 Plan") which provided for the granting of stock options to employees, directors and consultants of the Company. Options granted under the 2010 Plan were either incentive stock options ("ISOs") or nonqualified stock options ("NSOs").

In February 2012, the Company adopted its 2011 Stock Incentive Plan (the "2011 Plan"). The 2011 Plan is divided into two separate equity programs, an option and stock appreciation rights grant program and a stock award program. In conjunction with adopting the 2011 Plan, the Company discontinued the 2010 Plan and released the shares reserved and still available under that plan.

In connection with the consummation of the IPO in October 2015, the board of directors adopted the Company's 2015 Equity Incentive Plan (the "2015 Plan" and collectively with the 2010 Plan and 2011 Plan, the "Plans"). In conjunction with adopting the 2015 Plan, the Company discontinued the 2011 Plan with respect to new equity awards.

The 2015 Plan

The 2015 Plan authorized the board of directors to grant incentive stock options, non-statutory stock options and RSUs to employees, directors, non-employee directors and consultants of the Company. Stock options under the 2015 Plan may be granted for periods of up to ten years. All stock options issued to date have had a 10-year life. Under the terms of the 2015 Plan, stock options may be granted at an exercise price not less than the estimated fair value of the Company's common stock on the date of grant, as determined by the Company's board of directors. For employees holding more than 10% of the voting rights of all classes of stock, the exercise price of ISOs and NSOs may not be less than 110% of the estimated fair value of the shares on the date of grant, as determined by the board of directors. To date, stock options granted under the 2015 Plan generally vest over four years and vest at a rate of 25% upon the first anniversary of the issuance date and 1/48th per month thereafter.

The initial number of shares of common stock available for future issuance under the 2015 Plan was 2,444,735. Beginning on January 1, 2016 and continuing until the expiration of the 2015 Plan, the total number of shares of common stock available for issuance under the 2015 Plan will automatically increase annually on January 1 by 4% of the total number of issued and outstanding shares of common stock as of January 1 of the same year. As of December 31, 2021 and 2020, 2,276,341 shares and 2,698,798 shares of common stock, respectively, were available for future issuance under the 2015 Plan.

The 2019 Plan

In September 2019, the Board of Directors adopted the 2019 Employment Inducement Incentive Plan (the "2019 Plan") which provides for the grant of stock options and other equity awards to any employee who has not previously been an employee or director of the Company or who is commencing employment with the Company following a bona fide period of nonemployment by the Company. Awards granted under the 2019 Plan are intended to constitute "employment inducement awards" under Nasdaq Listing Rule 5635(c)(4). Options granted under the 2019 Plan are nonqualified stock options ("NSOs") which may be exercisable for periods of up to ten years and the options shall be granted at an exercise price of not less than 100% of the fair market value of the Company's common stock on the date of grant.

The initial number of shares of common stock available for future issuance under the 2019 Plan was 1,815,000. During 2021, the total number of shares of common stock available for issuance under the 2019 Plan has increased by 1,000,000 shares. As of December 31, 2021 and 2020, 486,234 shares and 204,600 shares, respectively, of common stock were available for future issuance under the 2019 Plan.

Activity under the Company's stock option plans is set forth below:

	Options Outstanding			
	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in thousands)
Balances at December 31, 2020	10,929,530	$ 10.77		
Options granted	5,178,897	7.10		
Options exercised	(528,503)	2.70		
Options cancelled	(3,387,708)	11.26		
Balances at December 31, 2021	12,192,216	9.42	7.5	$ 1,182
Options Exercisable—December 31, 2021	6,054,635	11.46	6.1	$ 1,155

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the quoted market price of the underlying common stock as of December 31, 2021.

The aggregate intrinsic value of stock options exercised in the years ended December 31, 2021, 2020, and 2019 was $2.2 million, $4.4 million, and $0.9 million, respectively.

The options granted in the years ended December 31, 2021, 2020, and 2019 had weighted-average per share grant-date fair values of $3.97, $3.94, and $7.03 respectively. As of December 31, 2021, the unrecognized compensation expense with respect to options granted was $23.6 million and is expected to be recognized over 2.9 years.

Early Exercise of Employee Options

Certain stock options granted under the Plans provide option holders the right to elect to exercise unvested options in exchange for restricted common stock. Such unvested restricted shares are subject to a repurchase right held by the Company at the original issuance price in the event the optionee's service to the Company is terminated either voluntarily or involuntarily. The right usually lapses 25% on the first anniversary of the vesting start date and in 36 equal monthly amounts thereafter. These repurchase terms are considered to be a forfeiture provision. The cash or full recourse notes received from employees for exercise of unvested options is treated as a refundable deposit and is classified as a liability on the balance sheets.

Time-based RSUs ("TRSU") and Performance-based RSUs ("PSU")

In October 2021, the Company granted 439,000 TRSUs as recognition awards to certain employees with an aggregated grant fair value of $2.3 million. 50% of the RSUs granted will vest at the end of the first year of the grant date and the remaining 50% will vest at the end of the second year provided the grantee continues to provide services to the Company. The Company recorded $0.2 million of stock-based compensation expense related to the TRSUs for the year end December 31, 2021.

In conjunction with the TRSU grants, the Company also granted 435,000 performance-based RSUs ("PSUs") as recognition awards to executive employees with an aggregated grant date fair value of $2.3 million. 50% of the PSUs granted will vest within one year of the grant date upon achievement of certain specific milestones and the remaining 50% will vest within two years of the grant date upon achievement of additional company objectives. As of December 31, 2021, the Company determined that it is not probable that the performance conditions will be satisfied and hence recorded no compensation cost for these awards as of and for the year ended December 31, 2021.

As of December 31, 2021, the unrecognized compensation expense with respect to the TRSUs was $2.1 million which is expected to be recognized over 1.6 years.

The fair value of RSUs, including time-based RSUs and performance-based RSUs is based on the market price of the Company's shares on the date of grant.

The following table summarizes the Company's RSU activities:

	Number of Shares	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in thousands)	Weighted Average Grant Date Fair Value
Balances at December 31, 2020	—			$ -
RSU's awarded	874,000			5.34
RSU's vested	—			-
RSU's cancelled	(5,750)			5.34
Balances at December 31, 2021	868,250	1.31	$ 3,760	5.34
Ending Exercisable—December 31, 2021	-	-	$ -	$ -

Employee Stock Purchase Plan

Concurrent with the completion of the IPO in October 2015, the Company's Employee Stock Purchase Plan ("ESPP") became effective. The ESPP allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The ESPP generally provides for six-month offering periods, and at the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last trading day of the offering period. The Company issued 183,865 shares and 128,684 shares of common stock under the ESPP in 2021 and 2020, respectively.

Shares available for future purchase under the ESPP were 1,751,818 shares and 1,935,683 shares at December 31, 2021 and 2020, respectively. The compensation expense related to the ESPP was $0.4 million, $0.4 million, and $0.6 million for the years ended December 31, 2021, 2020 and 2019, respectively. As of December 31, 2021, there was $0.2 million of unrecognized compensation cost related to the ESPP, which the Company expects to recognize over 5 months.

Stock Based Compensation

Total stock-based compensation recorded related to options granted to employees and non-employees and employee stock purchase plan was as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Research and development	$ 5,797	$ 6,825	$ 9,226
General and administrative	7,370	7,961	9,874
Total stock-based compensation expense	$ 13,167	$ 14,786	$ 19,100

Stock-based compensation expense for employees was $13.1 million, $14.7 million, and $18.9 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Stock-based compensation expense for non-employees was $0.1 million, $0.1 million, and $0.2 million for the years ended December 31, 2021, 2020, and 2019, respectively.

The Company estimated the fair value of employee stock options and ESPP using the Black-Scholes valuation model based on the date of grant with the following assumptions:

	Options			ESPP		
	Year Ended December 31,			Year Ended December 31,		
	2021	2020	2019	2021	2020	2019
Expected volatility	69.6% - 74.8%	64.4% - 73.3%	64.4% - 68.6%	46.87% - 69.58%	47.3% - 122.1%	60.8% - 71.9%
Risk-free interest rate	0.5% - 1.3%	0.2% - 1.3%	1.4% - 2.5%	0.04% - 0.10%	0.1% - 0.2%	1.6% - 2.4%
Dividend yield	— %	— %	— %	— %	— %	— %
Expected term (in years)	4.5 - 4.8	4.7 - 4.9	4.9 - 5.0	0.5	0.5	0.5

Expected term. The expected term of stock options represents the period that the stock options are expected to remain outstanding and is based on vesting terms, exercise term and contractual lives of the options. The expected term of the ESPP shares is equal to the six-month look-back period.

Expected volatility. The expected stock price volatility for the Company's stock options is based on the historical stock price volatility which is commensurate with the estimated expected term of the stock awards. Volatility for ESPP shares is equal to the Company's historical volatility over a six-month offering period.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield with a maturity equal to the expected term of the stock options in effect at the time of grant.

Dividend yield. The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plan to pay any dividends on its common stock.

15. Income Taxes

The Company derives its income only from the United States. The components of the benefit from income taxes are as follows (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Current:			
Federal	$ —	$ (13,912)	$ (390)
State	—	1	—
Total current	—	(13,911)	(390)
Deferred:			
Federal	—	—	(37)
State	—	—	—
Total deferred	—	—	(37)
Benefit from income taxes	$ —	$ (13,911)	$ (427)

A reconciliation of the Company's effective tax rate to the statutory U.S. federal rate is as follows:

	Years Ended December 31,		
	2021	2020	2019
U.S. federal taxes at statutory rate	21.0%	21.0%	21.0%
State tax, net of federal benefit	2.1%	3.3%	1.3%
Stock compensation	(4.3)%	(2.2)%	(1.2)%
Tax credits	2.8%	11.0%	2.5%
Change in valuation allowance	(21.6)%	(31.2)%	(22.8)%
Net operating loss carryback	0.0%	27.9%	0.0%
Return to provision adjustment	0.0%	0.0%	(0.3)%
Other	0.0%	(0.1)%	(0.1)%
Total	0.0%	29.7%	0.4%

The types of temporary differences that give rise to significant portions of the Company's deferred income tax assets and liabilities are set out below (in thousands):

	Year Ended December 31,	
	2021	2020
Net operating loss carryforwards	$ 49,186	$ 37,099
Research and development credits	20,809	16,803
Lease liability	4,555	5,223
Intangible assets	3,804	3,923
Deferred revenue	41,291	38,832
Accrued liabilities	1,933	1,512
Stock-based compensation	7,480	8,578
Other	29	20
Total gross deferred income tax assets	129,087	111,990
Less: valuation allowance	(124,477)	(106,448)
Deferred tax assets, net of valuation allowance	4,610	5,542
Fixed assets	(253)	(433)
Right-of-use assets	(4,069)	(4,724)
Prepaid expenses	(288)	(385)
Deferred tax liabilities	(4,610)	(5,542)
Net deferred income tax liabilities	$ —	$ —

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was enacted in response to the COVID-19 pandemic. The tax relief measures under the CARES Act for businesses include a five-year net operating loss carryback, suspension of annual deduction limitation of 80% of taxable income from net operating losses generated in a tax year beginning after December 31, 2017, changes in the deductibility of interest, acceleration of alternative minimum tax credit refunds, payroll tax relief, and a technical correction to allow accelerated deductions for qualified improvement property.

The Company recognized income tax benefit of $13.9 million for the year ended December 31, 2020, through the net operating loss carryback under the CARES Act which generated a refund of income taxes paid for 2018.

The Company has established a valuation allowance against all of its net deferred tax assets. Management considered all available evidence, both positive and negative, including but not limited to our historical operating results, income or loss in recent periods, cumulative losses in recent years, forecasted earnings, future taxable income, and significant risk and uncertainty related to forecasts, and concluded the deferred tax assets are not more likely than not to be realized. The net change in the total valuation allowance for the years ended December 31, 2021, 2020 and 2019 was an increase(decrease) of $18.0 million, $(2.7) million, and $22.7 million, respectively.

The Company had net operating loss carryforwards for federal and state income tax purposes of approximately $226.1 million and $24.2 million, respectively, as of December 31, 2021, available to reduce future taxable income. Of the federal net operating loss carryforwards, $65.6 million will begin to expire in 2034, if not utilized and $160.5 million will carryforward indefinitely. The state net operating loss carryforwards will begin to expire in 2032, if not utilized.

The Company also has federal and state research and development tax credits carryforwards of $19.1 million and $11.2 million, respectively, as of December 31, 2021 available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2031 if not utilized. The state research and development tax credits have no expiration date.

Internal Revenue Code section 382 ("IRC Section 382") places a limitation (the "Section 382 Limitation") on the amount of taxable income that can be offset by net operating loss ("NOL") carryforwards after a change in control (generally greater than 50% change in ownership) of a loss corporation. California has similar rules. The Company has performed an IRC Section 382 analysis and determined there was an ownership change in 2017 that resulted in 382 limitations. When an ownership change occurs, IRC Section 382 limits the use of NOLs and credits in subsequent periods based on the annual 382 limitations. The annual 382 limitations may limit the full use of available tax attributes in one year but the identified ownership changes may not result in expiration of tax attributes for use prior to expiration of their respective carryforward periods. Accordingly, none of the tax attributes have been reduced but limited the full use in 2018. The Company has determined that, while an ownership change has occurred, the applicable limits would not impair the value or anticipated use of the Company's federal and state net operating losses. Although realization is not assured, management believes it is more likely than not that any limitation under IRC Section 382 will not impair the realizability of the deferred income tax assets related to federal and state net operating loss carryforwards. The Company reviewed its stock ownership for the year ended December 31, 2021 and concluded no ownership changes occurred in current year which would result in a reduction of its net operating loss or in its research and development credits expiring unused. If additional ownership change occurs, the utilization of net operating loss and credit carryforwards could be significantly reduced.

A reconciliation of the beginning and ending unrecognized tax benefit amount is as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Balance at the beginning of the year	$ 6,454	$ 5,249	$ 3,756
Additions based on tax positions related to current year	1,326	1,205	1,403
Adjustment based on tax positions related to prior years	—	—	90
Balance at end of the year	$ 7,780	$ 6,454	$ 5,249

Of the unrecognized tax benefits as of December 31, 2021, 2020 and 2019, approximately $0, $0, and $0.9 million, respectively, would affect the Company's effective tax rate if recognized.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. To the extent accrued interest and penalties do not ultimately become payable, amounts accrued will be reduced and reflected as a reduction of the provision for income taxes in the period that such determination is made. Interest and penalties have not been accrued for 2021, 2020 and 2019.

The Company files income tax returns in the U.S. federal and state jurisdictions. The tax years 2010 to 2020 remains open to U.S. federal and state examination to the extent of the utilization of net operating loss and credit carryovers. As of December 31, 2021, the Company is under examination by the State of California.

16. Defined Contribution Plan

The Company sponsors a defined contribution plan under Section 401(k) of the Internal Revenue Code covering substantially all full-time U.S. employees. Employee contributions are voluntary and are determined on an individual basis subject to the maximum allowable under federal tax regulations. During the years ended December 31, 2021, 2020 and 2019, the Company made contributions to the plan of $0.9 million, $0.8 million, and $0.8 million, respectively.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

Not Applicable.

Item 9A. ***Controls and Procedures***

Evaluation of Disclosure Controls and Procedures.

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended (the "Exchange Act") refers to controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our Principal Executive Officer and Principal Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2021, the end of the period covered by this Annual Report on Form 10-K. Management's assessment of internal control over financial reporting was conducted using the criteria defined in the Internal Control—Integrated Framework (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based upon such evaluation, our Principal Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f). Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements prepared for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management, with the participation of our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control – Integrated Framework, management concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has also been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report included in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during our fiscal quarter ended December 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

Item 9C. ***Disclosure Regarding Foreign Jurisdictions That Prevent Inspections***

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission within 120 days after the Company's fiscal year end and is incorporated herein by reference.

We have adopted a code of business conduct and ethics that applies to all employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The code of business conduct and ethics is available on our website at www.cytomx.com. Amendments to, and waivers from, the code of business conduct and ethics that apply to any director, executive officer or persons performing similar functions will be disclosed at the website address provided above and, to the extent required by applicable regulations, on a Current Report on Form 8-K filed with the SEC.

Item 11. Executive Compensation

The information required by this Item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission within 120 days after the Company's fiscal year end and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission within 120 days after the Company's fiscal year end and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission within 120 days after the Company's fiscal year end and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission within 120 days after the Company's fiscal year end and is incorporated herein by reference.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(1) *Financial Statements:*

The financial statements required by Item 15(a) are filed as part of this Annual Report on Form 10-K under Item 8 "Financial Statements and Supplementary Data."

(2) *Financial Statement Schedules*

The financial statement schedules required by Item 15(a) are omitted because they are not applicable, not required or the required information is included in the financial statements or notes thereto as filed in Item 8 of this Annual Report on Form 10-K.

(3) *Exhibits.*

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
1.1	Open Market Sale Agreement, dated as of February 27, 2020, by and between CytomX Therapeutics, Inc. and Jefferies LLC.	10-K	2/27/2020	1.1	
3.1(a)	Amended and Restated Certificate of Incorporation.	8-K	10/19/2015	3.1	
3.1(b)	Certificate of Amendment to Amended and Restated Certificate of Incorporation of CytomX Therapeutics, Inc.	8-K	6/23/2020	3.1	
3.2	Amended and Restated Bylaws.	8-K	10/19/2015	3.2	
4.1	Reference is made to exhibits 3.1 through 3.2.				
4.2	Specimen Common Stock Certificate.	S-1/A	9/28/2015	4.1	
4.3	Registration Rights Agreement dated as of September 29, 2017 by and between CytomX Therapeutics, Inc. and Amgen, Inc.	10-Q	11/7/2017	4.4	
4.4	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.	10-Q	8/6/2020	4.4	
10.1(a)#	2010 Stock Incentive Plan adopted on September 21, 2010 ("2010 Plan").	S-1	8/28/2015	10.3	
10.1(b)#	Form of Stock Option Agreement under the 2010 Plan.	S-1	8/28/2015	10.4	
10.2(a)#	2011 Stock Incentive Plan, adopted on February 7, 2012, as amended ("2011 Plan").	S-1	8/28/2015	10.1	
10.2(b)#	Form of Restricted Stock Award Agreement and Option Exercise Agreement under the 2011 Plan.	S-1	8/28/2015	10.2	
10.3(a)#	2015 Equity Incentive Plan ("2015 Plan").	S-1/A	10/6/2015	10.5	
10.3(b)#	Form of 2015 Plan Option Agreement under the 2015 Plan.	10-Q	11/23/2015	10.4	
10.3(c)#	Form of 2015 Plan Early Exercise Option Agreement	10-Q	11/23/2015	10.5	
10.3(d)#	Form of 2015 Plan Restricted Share Unit Award Grant Notice and Agreement				X
10.4(a)#	2019 Employment Inducement Incentive Plan adopted on September 18, 2019 ("2019 Plan").	10-Q	11/7/2019	10.1	

10.4(b)#	Form of Stock Option Agreement under the 2019 Plan.	10-Q	11/7/2019	10.2
10.5#	2015 CytomX Therapeutics, Inc. Employee Stock Purchase Plan.	S-1/A	9/28/2015	10.6
10.6#	Form of Indemnification Agreement by and between CytomX Therapeutics, Inc. and each of its directors and each of its executive officers.	S-1	8/28/2015	10.16
10.7#	Employment Offer Letter Agreement between CytomX Therapeutics, Inc. and Sean A. McCarthy, D. Phil, dated as of December 15, 2010.	S-1	8/28/2015	10.7
10.8#	Employment Offer Letter Agreement between CytomX Therapeutics, Inc. and Amy C. Peterson, M.D. dated as of September 23, 2019.	10-Q	11/7/2019	10.5
10.9	Employment Offer Letter Agreement between CytomX Therapeutics, Inc. and Carlos Campoy dated as of March 9, 2020.	10-Q	5/7/2020	10.3
10.10#	Amended and Restated Severance and Change of Control Agreement dated February 27, 2019, by and between CytomX Therapeutics, Inc. and Sean McCarthy. D. Phil.	10-Q	5/9/2019	10.1
10.11#	Amended and Restated Severance and Change of Control Agreement effective as of October 14, 2019, by and between CytomX Therapeutics, Inc. and Amy C. Peterson, M.D.	10-Q	11/7/2019	10.6
10.12#	Amended and Restated Severance and Change of Control Agreement dated March 25, 2019, by and between CytomX Therapeutics, Inc. and Lloyd Rowland.	10-Q	5/9/2019	10.2
10.13††	Severance and Change of Control Agreement effective as of February 3, 2020, by and between CytomX Therapeutics, Inc. and Alison Hannah, M.D.	10-K	2/27/2020	10.32
10.14#	Severance and Change of Control Agreement dated March 23, 2020, by and between CytomX Therapeutics, Inc. and Carlos Campoy.	10-Q	5/7/2020	10.1
10.15	Lease dated as of December 10, 2015, by and between CytomX Therapeutics, Inc. and HCP Oyster Point III LLC.	8-K	12/16/2015	10.1
10.16(a)	Exclusive License Agreement dated as of August 19, 2010, by and between The Regents of the University of California and CytomX Therapeutics, Inc., as amended by Amendment No. 1 to Exclusive Agreement effective as of May 30, 2013 and Amendment No. 2 to Exclusive Agreement effective as of November 8, 2013.	S-1/A	9/18/2015	10.21
10.16(b)††	Amendment No.3 to Exclusive License Agreement effective as of April 2, 2019, by and between CytomX Therapeutics, Inc. and The Regents of the University of California.	10-Q	5/9/2019	10.6
10.17†	Research Collaboration, Option and License Agreement dated as of May 30, 2013, by and between CytomX Therapeutics, Inc. and Pfizer, Inc.	10-Q	11/5/2020	10.1
10.18(a)†	Collaboration and License Agreement dated as of May 23, 2014, by and between CytomX Therapeutics, Inc. and Bristol Myers Squibb Company.	10Q	11/5/2020	10.2

10.18(b)†	Amendment to Extend Collaboration and License Agreement, dated March 17, 2017, by and between the Company and Bristol Myers Squibb.	10-Q	5/5/2017	10.1	
10.18(c)†	Amendment No 2 to Collaboration and License Agreement, as amended, dated March 17, 2017, by and between the Company and Bristol Myers Squibb, effective as of February 22, 2021.	10-Q	5/6/2021	10.2	
10.19(a)†	Co-Development and License Agreement, dated April 21, 2016, by and between CytomX Therapeutics, Inc. and AbbVie Ireland Unlimited Company.	10-Q	8/3/2016	10.1	
10.19(b)†	First Amendment to the CD71 Co-Development and License Agreement by and between CytomX Therapeutics, Inc. and AbbVie Ireland Unlimited Company, dated as of October 5, 2016.	10-Q	11/6/2018	10.1	
10.19(c)†	Second Amendment to the CD71 Co-Development and License Agreement by and between CytomX Therapeutics, Inc. and AbbVie Ireland Unlimited Company, effective as of March 31, 2017.	10-Q	11/6/2018	10.2	
10.19(d)†	Third Amendment to the CD71 Co-Development and License Agreement by and between CytomX Therapeutics, Inc. and AbbVie Ireland Unlimited Company, effective as of January 3, 2018.	10-Q	11/6/2018	10.3	
10.19(e)†	Amended and Restated Discovery Collaboration and License Agreement, dated as of June 28, 2019, by and between CytomX Therapeutics, Inc., and AbbVie Ireland Unlimited Company.	10-Q	8/7/2019	10.1	
10.20(a)††	Collaboration and License Agreement by and between CytomX Therapeutics, Inc. and Amgen, Inc. dated as of September 29, 2017.	10-Q	11/7/2017	10.1	
10.20(b)†	Amendment No. 1 to the Collaboration and License Agreement, dated as of September 29, 2020, by and between CytomX Therapeutics, Inc. and Amgen, Inc.	10-Q	11/5/2020	10.3	
10.20(c)††	Amendment No. 2 to the Collaboration and License Agreement, dated as of October 27, 2021, by and between CytomX Therapeutics, Inc. and Amgen, Inc.				X
10.21††	Collaboration and License Agreement dated as of March 23, 2020, by and between CytomX Therapeutics, Inc. and Astellas Pharma Inc.	10-Q	5/7/2020	10.4	
10.22(a)†	Research Collaboration Agreement dated as of January 8, 2014, by and between ImmunoGen, Inc. and CytomX Therapeutics, Inc., as amended by the First Amendment to Research Collaboration Agreement effective as of April 3, 2015.	S-1/A	10/2/2015	10.17	
10.22(b)†	Second Amendment to the Research Collaboration Agreement by and between CytomX Therapeutics, Inc. and ImmunoGen Inc., dated as of February 12, 2016.	10-Q	11/6/2018	10.5	
10.22(c)†	Third Amendment to the Research Collaboration Agreement by and between CytomX Therapeutics, Inc. and ImmunoGen Inc., dated as of March 3, 2017.	10-Q	11/6/2018	10.6	
10.23†	License Agreement by and between CytomX Therapeutics, Inc. and ImmunoGen Inc., dated as of February 12, 2016.	10-Q	11/6/2018	10.4	

10.24#††	Consulting Agreement effective as of December 14, 2020, by and between CytomX Therapeutics, Inc and Dr. W. Michael Kavanaugh.	10-K	2/24/2021	10.24	
10.25#	Retirement Agreement by and between CytomX Therapeutics, Inc and Dr. W. Michael Kavanaugh, dated as of December 1, 2020.	10-K	2/24/2021	10.25	
10.26#	Consulting Agreement, effective as of April 1, 2021, by and between CytomX Therapeutics, Inc. and Dr. Charles Fuchs.	10-Q	5/6/2021	10.3	
23.1	Consent of Independent Registered Public Accounting Firm.				X
24.1	Power of Attorney (included on signature page)				X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1**	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document				X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				X

† Confidential treatment has been granted for certain information contained in this exhibit. Such information has been omitted and filed separately with the Securities and Exchange Commission.

†† Certain confidential portions of this exhibit have been omitted from this exhibit.

# Indicates management contract or compensatory plan.

** The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of CytomX Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

Registrants may voluntarily include a summary of information required by Form 10-K under Item 16. We have elected not to include such summary.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CytomX Therapeutics, Inc.

Date: March 1, 2022

By: /s/ Sean A. McCarthy
Name: **Sean A. McCarthy, D.Phil.**
Title: **Chief Executive Officer and Chairman**
(Principal Executive Officer)

By: /s/ Christopher W. Ogden
Name: **Christopher W. Ogden**
Title: **Vice President, Finance and Accounting**
(Principal Accounting Officer)

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Sean A. McCarthy, D. Phil. and Lloyd Rowland and each of them, with full power of substitution and resubstitution, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agents full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorney-in-fact and agents or his substitute or substitutes may lawfully do or cause to be done by virtue thereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ Sean A. McCarthy Sean A. McCarthy, D.Phil.	Chief Executive Officer and Director *(Principal Executive Officer)*	March 1, 2022
/s/ Matthew P. Young Matthew P. Young	Director	March 1, 2022
/s/ Alan Ashworth Alan Ashworth, Ph.D. FRS	Director	March 1, 2022
/s/ Frederick W. Gluck Frederick W. Gluck	Director	March 1, 2022
/s/ John A. Scarlett John A. Scarlett, M.D.	Director	March 1, 2022
/s/ Elaine V. Jones Elaine V. Jones, Ph.D.	Director	March 1, 2022
/s/ James R. Meyers James R. Meyers	Director	March 1, 2022
/s/ Mani Mohindru Mani Mohindru, Ph.D.	Director	March 1, 2022
/s/ Halley E. Gilbert Halley E. Gilbert	Director	March 1, 2022